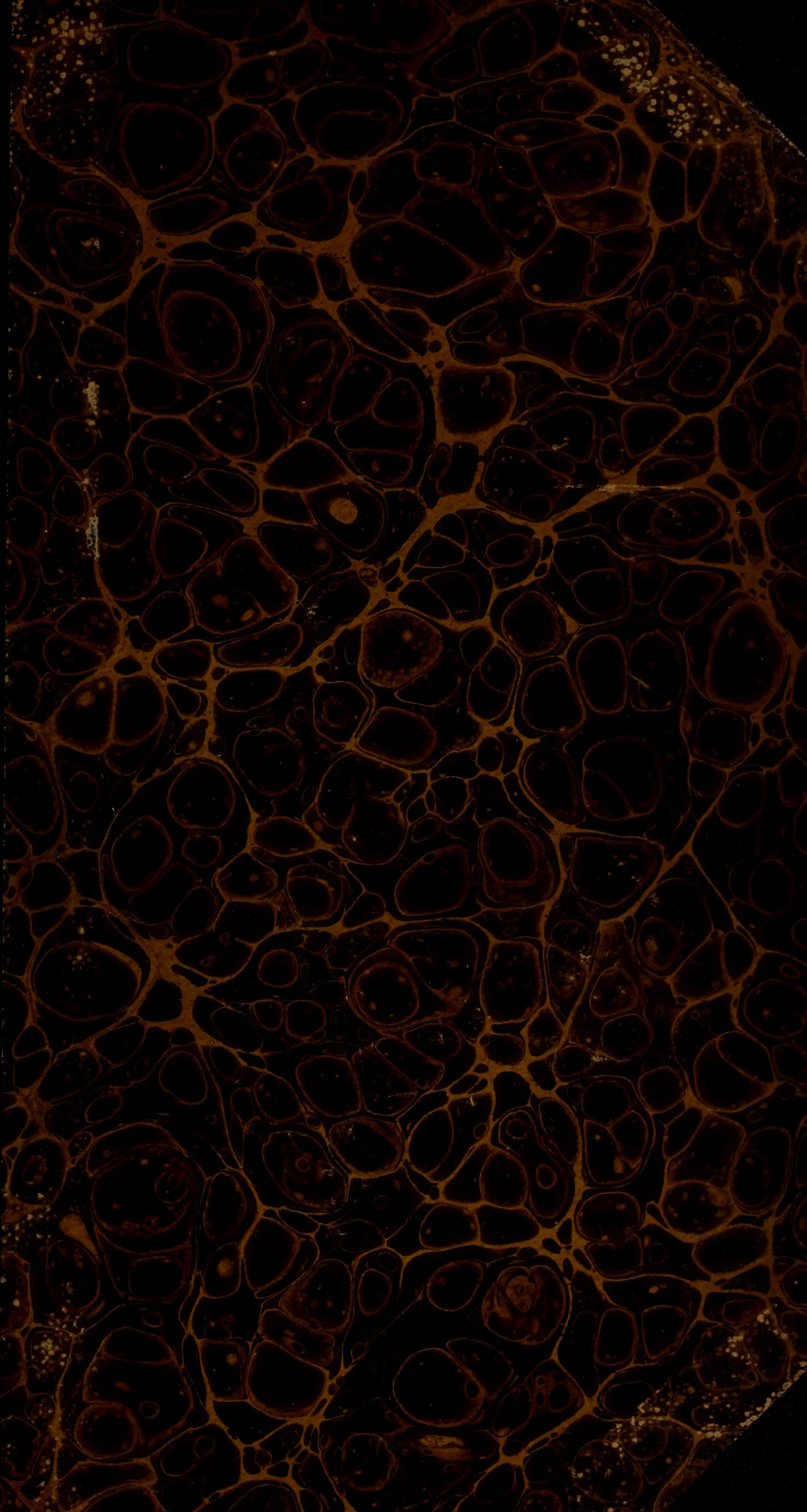

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ORIGNAL CONTRIBUTIONS.

FIBRINE, ITS NATURE AND USE. FROM AN UNPUBLISHED MONOGRAPH ON THE BLOOD.

BY PROF. T. E. ST. JOHN.

Fibrine exists in the blood in very small quantities, so that one thousand grains of normal blood would not contain more than two or three grains of fibrine, and adopting even the highest estimate, there are never above five drachms in the whole of the circulating fluid. It is found in greater quantities in the venous than in arterial blood, (excepting in the blood of the renal veins) as is shown by the investigations of Bechlard ("*Gazette Medicale de Paris*," 1848). The blood of adults contains more than that of infants; there is little or none in the blood of the fœtus, none in the chyle, none in an egg, and less in the blood of the carnivora than in the herbivora. These facts indicate very clearly the nature of this substance; that it must be an effete material designed to be speedily eliminated from the circulating fluid.

Some physiologists contend that fibrine is the plastic material of the blood, or the source from which all the tissues derive their material of growth; but that this idea is erroneous may be shown by an examination the analyses made by recent observers of this substance in the blood of individuals who were in a comparative state of health; and also its relation to certain diseases indicates the same.

The fact that this substance is found in larger proportions in venous than in arterial blood, would suggest that it must arise from "waste" of the tissues; and this hypothesis is strengthened by our observa tions of various diseases in which the increase of fibrine is cotemporary with increased rapidity of capillary circulation and emaciation. This is also corroborated by the experiments of Dieffenbach and Bischoff in which defibrinated blood was injected into the vessels of animals that had been reduced to syncope by bleeding, with the effect of restoring the heart's action, and the return of the blood by the veins *containing fibrine in a marked degree.* That it cannot be obtained from the food undergoing digestion, is evident from the effect that follows the introduction of an increased quantity of alimentary materials, which will augment the amount of red corpuscles of the blood, but no change can be observed in the quantity of fibrine.

Fibrine may also originate from the action of oxygen upon the albumen of the blood, or in other words, it may be regarded as *oxygenized albumen* and *debris*, and it is well known to all physiologists that oxidation appertains to the *retrograde*, rather than to the ascending metamorphosis. Its percentage is observed to increase if oxygen be inhaled, or the respiration be quickened. In acute inflammation, when the tissues are being burned up by the excess of oxygen, the fibrine will be inordinately increased. These facts determine beyond a doubt that fibrine is the result of degeneration or waste in the tissues, and the oxidation of albumen.

If this be the origin of fibrine, it would be folly to suppose that it was *the* plastic material of the blood. But there are many other facts which tend to subvert the old idea of the increased vitality of this material, and prove conclusively that it is designed for excretion rather than for the production of the tissues.

If it be necessary to the growth of the various organs, why does it exist in such minute quantities? The few grains that are found in healthy blood, are certainly by no means adequate to supply all the material that is necessary to repair the waste which is continually going on in the tissues, to say nothing of the processes of growth that in early life are being conducted with such activity. Analyses of the blood of the fœtus demonstrate that *no* fibrine can be found in it; how then can the growth of the tissues at this period of life be accounted for, if fibrine is *the* plastic material. The absence of fibrine from the egg, is a significant fact; as the changes and growth of the tissues which occur there give indubitable evidence that fibrine is *not* required, and does not hold any relation to the vital processes of the animal organization.

If the blood of young animals in which the growth of the tissues is rapid and in whom there is little or no excrementitious matter, be examined, it will be found to contain but a small amount of fibrine compared with that of an adult. How can these facts be explained, if the old hypothesis of the nature of the fibrine be true?

What is the effect upon fibrine during the progress of certain diseases? It is increased in cancer, phthisis, acute rheumatism, pneumonia, cholera, scurvy, typhus fever, chlorosis and others, from 2 to 10 times its normal quantity. How will this fact be reconciled with the idea of the *increased* vitality of this material? Can it be said that the presence of these diseases is favorable to the development of the tissues and organs of the body? Certainly not. Then it cannot be considered as an essential element of the blood, but only present as an effete material; and as the waste of the tissues is excessive in disease, it would be expected, as is found to be the case, that fibrine would increase in quantity under those circumstances.

In the process of starvation, instead of being diminished, it is found to increase rapidly, so that in the analysis of the blood of the horse that had been deprived of food for four days, the results of which were detailed by Dr. Franz Simon, the fibrine was found to have increased from five, to nine parts in the thousand, *or nearly doubled*.

Bleeding increases its amount, according to the observations of Andral and Gavarret, as high as ten in a thousand; and Scherer found it at the third bleeding in a case of pneumonia increased to twelve and seven-tenths. In view of these facts, the inquiry is presented, Is there anything to be learned from analyses of the blood? If so, it will be at once determined that an excess of fibrine is not a proof of increased strength, but just the opposite. It is increased in quantity by every condition that depresses the vital force of the animal; it is in excess when the individual is prostrated by disease; and diminished as the health of the body is regained.

By an examination of the renal vein, it will be found to contain no fibrine; indeed, according to Bernard, the blood of this vein is "arterial in every characteristic point, except that it is deficient in fibrine; a circumstance seeming to show the excretory nature of the function of the kidneys." The analyses of Dr. F. Simon, as well as those of Bernard, establish beyond a doubt, that this material is removed from the blood in its passage through the kidneys. This is a fact of much importance, and must have a considerable influence in determining the nature of this material; for if it be not an effete substance it would hardly be expected that it should be so thoroughly eliminated by these organs, and yet no deleterious effects follow its removal.

Many have supposed that because of the existence of a substance in muscle which is called fibrine, it must be that the fibrine of the blood contributes to its formation; or, in other words, passes directly from the blood to the muscle; and without investigation this idea might seem plausible; but when the chemist proves that there is no similarity existing in the two substances, and they are decidedly different in all their characteristics, the argument is divested of its beauty, and deprived of its force.

It is to be regretted that this material has so long been known by a name which would indicate that it possessed the power of assuming the fibrous form, and it has even been asserted that coagulable lymph owes its characteristic properties to the fibrine it contains. But is not this a mere assumption? What proof have we that this is a fact? None. Examine the fibrine as it is seen in an aneurismal sac. What are its appearances there? It is not organized, forming false membrane, areolar tissue, &c.; but it is laminated as if deposited as sand would be from a rapid current flowing into a lake; and it is impossible to find "a single instance in which the fibrine is organized, though in constant contact with the blood." Dr. Inman in a late number of the "*Liverpool Medico-Chirurgical Review*" remarks: "Where large quantities of blood are effused into the pleural or scrotal cavity, the fluid remains for years without any attempt at organization; and even when blood is effused into the parenchymatous parts of the body, the fibrine undergoes no structural change. Surely if fibrine were so prone to organization as it has been supposed to be, we should scarcely have an extensive bruise occurring, without the structure of the part undergoing more or less permanent alteration."

Why, it may be asked, if fibrine is only an effete matter, did the idea of its increased vitality so long find advocates among the best physiologists of the day; and why is it that some eminent observers of the present time are pertinaciously adhering to the old hypotheses? The fact is, these hypotheses originated from arguing from mere assumptions, without the least shadow of proof to substantiate them; and many are found at the present day who are willing to accept the ideas that have descended through a long list of writers, rather than investigate for themselves.

What are the arguments upon which the old idea is sustained? 1st, it is asserted that inflammation is an increase of force: 2d, that blood in inflammation is richer than healthy blood: 3d, that the fibrine in inflammation is increased: 4th, that there is an increased outpouring of lymph and that lymph and fibrine are the same: 5th, that because the blood is too rich, contains too much fibrine, it requires depletion: 6th, that bleeding is of advantage, because it will remove so much fibrine, and thus bring the blood back to its normal richness: and as patients will sometimes recover under such treatment, these assumptions are taken as *facts!* Now what is the result of recent investigations? It is well known that plethora scarcely ever produces inflammation, but that poverty of blood does so frequently; that bleeding instead of diminishing, actually increases the amount of fibrine; that lymph and fibrine are *not* the same; and that an excess of fibrine exists in the weekly, and those undergoing rapid disintegration of tissues.

I therefore conclude that fibrine is *not* more highly vitalized than the other constituents of the blood; that the tissues do not depend upon it for their supplies of nutriment; that the blood does not owe its power of coagulation to its presence; that, in short, it is *not* the plastic material of the blood, but rather it is a genuine excretive formation on its way to be eliminated from the system.

STOMACH POISONING.

BY PROF. A. J. HOWE.

Poisons are not unfrequently introduced into the stomach accidentally, or with suicidal or murderous intents; and the physician is summoned in haste to administer relief after the toxic agent begins to manifest its influence. Under such circumstances all the resources of science that have any bearing upon the case, need to be immediately available. In a majority of instances it is difficult to ascertain seasonably what variety of poison has been swallowed.

Toxicologists have classified poisons according to the natural kingdoms from which they are derived;—as mineral, vegetable and animal; and according to their mode of action upon the system;—as irritants, narcotics, and narcotico-irritants. The mineral poisons are mostly corrosive-irritants, and often prove fatal from the inflammation they excite along the mucous membrane of the intestinal canal. Fortunately most poisonous agents of this class have such an affinity for, or hold such a chemical relation with other agents, that when brought together as they may be in the stomach, though severally poisonous, a chemical union results which is either harmless, or possesses properties not imminently dangerous.

Among the poisons of this class which are best known to the people and, therefore, oftenest used for destructive purposes, may be mentioned, arsenic, corrosive sublimate, antimony, preparations of lead, copper and zinc, and oxalic, sulphuric, muriatic and other acids. For a more extended list of mineral and other poisons, with their *antidotes*, the reader is referred to the Appendix of *Cleaveland's Medical Lexicon*, and to works on toxicology, as it is not in keeping with the designs of this article to give anything but a passing notice of these agents as a class.

The symptoms of poisoning by a mineral agent, are those of violent irritation and inflammation along the mucous surfaces they have passed. The most violent gastritis is sure to supervene, and vomiting, retching and purging are accompanying diagnostic manifestations. The mouth, pharynx and œsophagus are dry and affected with an intolerable burning sensation, which cooling drinks will not assuage. These symptoms generally exist a number of hours, when, if the patient be not relieved, cold sweats and rigors come on, and the termination is fatal.

Poisonous vegetable agents are usually narcotic, and have no *chemical* antidotes; most of them are very active, and exert an extremely deadly influence upon the animal economy. Among the vegetable poisons likely to be used with criminal or suicidal designs, are opium and its various preparations, strychnia, prussic acid, aconite, belladonna, stramonium, conium, savin and croton oil.

The symptoms of poisoning by most of the above named vegetables and vegetable preparations, are profound narcotism, with a train of varying phenomena, which do not greatly differ from those arising from congestion of the brain. There will be giddiness, vertigo, drowsiness, loss of vision and hearing, dryness of the fauces, headache, nausea, sense of weakness, cold sweat, dilatation or contraction of the pupils, loss or incoherency of speech, delirium, insensibility, coma, and other manifestations varying according to the peculiar poison taken and idiosyncracy of the patient. Several of the vegetable poisons, as nux-vomica, conium, stramonium, aconite, belladonna, and some others, belong to the narcotico-irritant class. The symptoms of the first mentioned, (nux-vomica,) and preparations from it, are characterized by convulsive movements, which somewhat resemble those attendant upon tetanus.

The animal poisons liable to be taken into the stomach, are not numerous, nor usually very destructive. The most dangerous of this class is cantharides, which on account of its reputation among the ignorant as an aphrodisiac is occasionally administered for base purposes. Its effects upon the alimentary canal and urinary passages are very distressing. The action of the poison is that of a powerful irritant, and excites a violent burning sensation in the throat, with difficulty of deglutition. In time a severe griping will be experienced in the bowels, and blood and mucus will be discharged from them during paroxysms of tenesmus. An overdose of the drug is likely to result fatally.

Certain kinds of animal food have been known to produce symptoms resembling those of irritant poisoning. In a majority of instances the effects may be referred more to idiosyncracy than to any specific poisonous quality in the food itself. However, there are well authenticated cases where a positive poison must have existed in the flesh and milk of animals, as in "milk sickness," a disease not afflicting a single individual who may have partaken of it, but several persons simultaneously, which must preclude the idea of idiosyncracy.

Certain shell-fish, as lobsters, oysters and mussels, have in numerous instances proved highly poisonous. Whether the toxic effects arise from some poisonous substances the animals have eaten, or from a putrefactive stage they have reached before they are pickled or eaten is not well established—undoubtedly both conditions may occasionally exist as causes.

The flesh of the common pheasant during the winter season, when the bird feeds on the leaves and buds of the Laurel, (Kalmia,) is known to poison those who eat it.

Pork, sausages, and cheese have all been known to excite symptoms of poisoning, but the noxious influence has been supposed to arise from partial decomposition, or fermentation—conditions such substances are sometimes liable before being used as food. Of the poisonous animal substances that are occasionally eaten, few are sufficiently active to destroy life. They are apt to excite disagreeable or distressing sensations along the alimentary tube, and in certain individuals their ingestion will be succeeded sooner or later with an eruption upon the skin. Their irritating qualities often excite copious vomiting and purging, which, fortunately, are salutary effects, as such animal poisons have no antidotes.

Management of Cases of Stomach Poisoning.—No cases in medical practice have more responsibility connected with them than those under consideration. Not only must the physician feel that the patient's life for the time is in his hands, but that a judicial investigation not unfrequently follows the casualty, in which the course pursued, no matter how well advised, will undergo a searching and often perplexing review. And quite too often when the treatment is announced, it is declared to have been inexcusably unseasonable, deficient, or absolutely injurious.

When a mineral corrosive poison has been swallowed, not only is the chemical antidote to be given, but albumen, gluten, milk, and mucilages of various kinds, varying according to those at hand, are to be thrown into the alimentary track, to act as *shielders* to the irritated surfaces. Wheat flour and water can be commanded under almost all circumstances, and will, besides shielding the inflamed surfaces, unite with arsenic and corrosive sublimate, and some other metallic poisons, forming a comparatively innoxious compound, which may be removed by emesis, catharsis, or the aid of the stomach pump. For corrosive sublimate, no better antidote is known than pure albumen; for arsenic, the hydrated peroxide of iron is reputed the best, and on that account is kept ready prepared by apothecaries, and should be by physicians who have not easy communication with the shops where it is sold.

The mineral acids when swallowed in poisonous doses, may be neutralized with alkaline draughts. It is well, if possible, to avoid the carbonated alkalies, as the disengagement of carbonic acid gas might be so great as to produce injury.

The vegetable poisons as a general thing have no antidotes, and they are to be dislodged from the stomach by artificial means. It will be beneficial to involve them in some glutenous or oleagenous substance to prevent them from being readily absorbed in cases where the means for manual evacuation are not at hand. Emetics are indicated, but they must be such as will act promptly, neither distending nor relaxing the walls of the stomach to any great degree. Nauseating emetics favor absorption of the poison. The mineral emetics, or those which excite vomiting by irritation, as the sulphates of zinc and copper, are far more efficient than lobelia or ipecacuanha. Common table salt, or mustard from the castor would be far less objectionable emetics than the more active nauseants. The introduction of large quantities of charcoal into the stomach containing organic poisons, from the great absorptive capacity of the material, sometimes proves serviceable.

The most certain mode of evacuating the stomach is by means of what is called a *stomach-pump*, an instrument or combination of instruments that should be within the reach of every physician. The instruments which are gotten up especially for manual evacuation of the stomach are rather complicated and consequently not so rapidly worked as a more simple apparatus. The common œsophageal tube and a syringe constitute an efficient stomach-pump. The tube is constructed like a large bougie or gum-elastic catheter, which has fenestra or eyes, like

Elastic Œsophageal tube—(Original.)

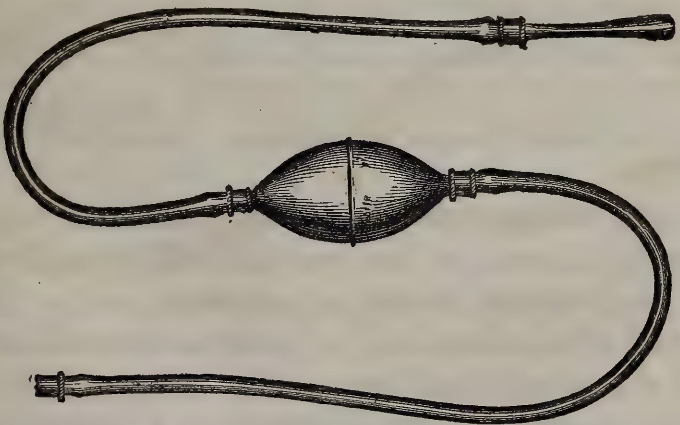
those in a catheter, near the end to be introduced into the stomach, and an expanded trumpet-like opening at the other end to receive the nozzle of a syringe. This simple contrivance appears to be the simultaneous invention of Dr. Physick, of Philadelphia, and Dr. Monroe, of Edinburgh, and was introduced to the notice of the profession as early as the year 1800. Since that time various attempts have been made to improve upon the first pattern, yet without adding to its general utility.

The introduction of the œsophageal tube is not attended with serious difficulties. If the patient be partially or entirely insensible, large cork vial-stoppers may be placed between the jaws, that the tube be not mashed by the teeth during a convulsive movement. The tube is then to be lubricated and passed rapidly backwards through the mouth and down the pharynx and œsophagus, there being little if any danger of forcing it into the larynx, or through the mucous membrane of the canal. As the tube reaches the stomach it becomes caught in a fold of the organ and the resistance communicated to the hand indicates where it is; also the length of the pipe projecting from the mouth will show the depth reached.

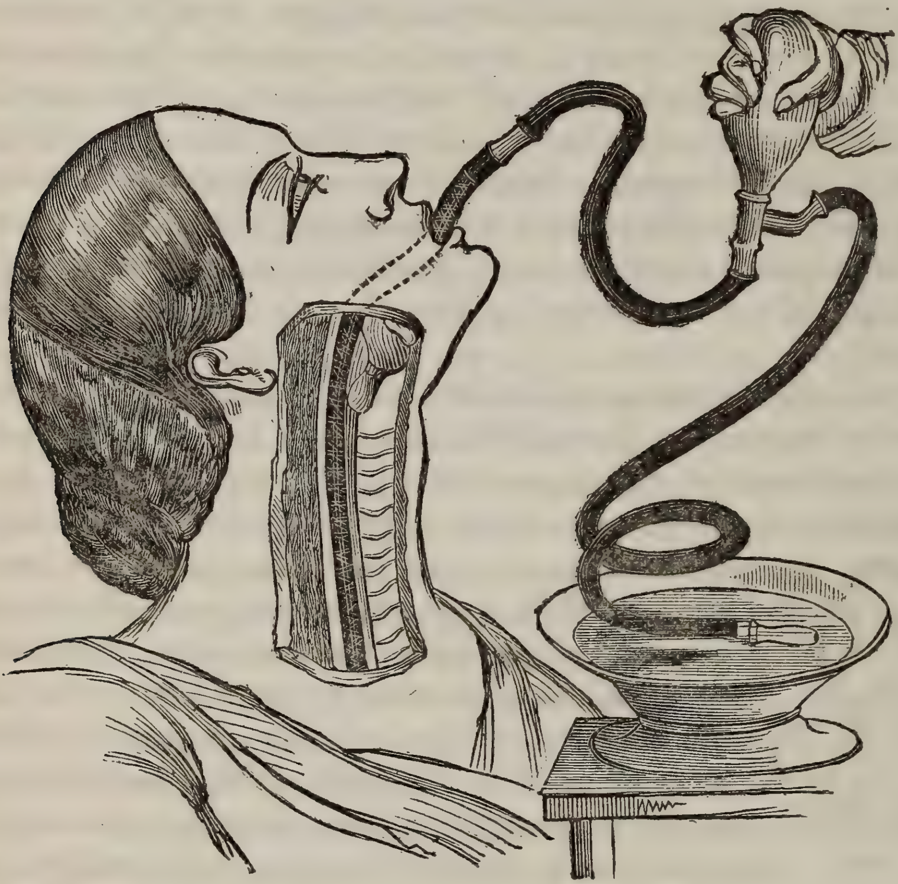
The only abstacle encountered in introducing an œsophageal catheter will be met in the pharynx, the end of the instrument becoming lodged in the sides or posterior wall of that part of the track. But with a little judgment and perseverance no protracted delay need be experienced in passing that portion of the way, as the instrument *slides over* the back part of the epiglottis which spasmodically closes and prevents an entrance into the larynx. Although a choking sensation is exited by the presence of the instrument, the feeling is borne without symptoms of distress.

Matson's Syringe. To be used with œsophageal tube.

As soon as the œsophageal tube has been introduced into the stomach, the pipe of a common elastic syringe like the one in the accompanying cut, should be forced


Davidson's Syringe, which may be used with the œsophageal tube to constitute a Stomach-pump.

into the expanded mouth of the catheter, when from a basin a quantity of water or mucilage or other diluent is to be injected through the combined apparatus into the stomach. After one or two pints of fluid have been thrown into the organ in this way the nozzles of the syringe are to be changed—the suction pipe being connected with the œsophageal tube and the other placed in another basin—and a quantity of the contents of the stomach, but not as much as has been thrown in, may be drawn out; the fluid obtained in this way being kept by itself for future examination. After one experiment in this way, the nozzles of the syringe are to be reversed, and the process repeated until the stomach is well cleansed, as may be known by the color of the returned fluid, or until all is accomplished that may be with the aid of a stomach-pump. The operation is not considered a dangerous one, yet cases are cited where the mucous membrane of the stomach has been torn by being violently sucked into the holes of the œsophageal tube by means of a too powerfully worked



This diagram represents the operation of evacuating the stomach by means of the œsophageal tube and a gum-elastic syringe. Fluids may be thrown into the stomach by changing the ends of the syringe pipes, placing the *injecting* extremity in the expanded mouth of the œsophageal-tube and the *suction* extremity in the bowl of fluid to be used.

The tissues of the neck are represented as cut away to show the œsophageal tube which has been passed through the mouth, pharynx. and œsophagus. The trachea is seen in front of the œsophagus.—(Original.)

pump. This undoubtedly happened when the stomach was too thoroughly evacuated.

The apparatus described above is all the stomach-pump that will ever be needed in ordinary practice. The instruments made especially fcr manually evacuating the stomach are too intricate, expensive, and liable to collect impurities around the piston and valves. In regard to the latter objection it has been alleged by the advocate for the defence of a prisoner charged with an attempt at poisoning, that the impurities in the pump used in the resuscitating efforts might have been of such a character as to create a reasonable doubt as to the cause of the death. The apparatus recommended in this article may be thoroughly and easily cleansed after use, and is so simple that it may be readily managed, even by a hospital nurse. Every practitioner possesses, or ought to possess a syringe like the one suggested. The only additional instrument needed to evacuate the stomach, is the œsophageal tube, which is useful also in dilating a stricture of the œsophagus, or in carrying forward into the stomach any substance that may have lodged in that canal.

It may be carried through the nose into the stomach for the purpose of introducing nourishment or medicine into that cavity in case the jaws be firmly set, as they may be sometimes in the management of lunatics.

In 1851, Dr. Falconer described a new stomach pump, in the *London Lancet.* The principal disadvantage of his instrument, though it is otherwise like the œsophageal tube and elastic syringe, is that the stomach cannot be washed out by it. In other words, the apparatus is suited to simple evacuation, but with it no fluid can be injected into the stomach for the purpose of diluting its contents, or by repeated efforts thoroughly rinsing out the organ.

The stomach-pump is generally to be used in cases of narcotic poisoning when it is impossible to excite vomiting, it being at the same time necessary to empty the organ without delay. This can be done even if the patient is unconscious. If the brain remain narcotised after the stomach is evacuated, it will be well to use stimulants in various ways. Ammonia may be applied to the nostrils; the fauces may be tickled; the cold douche applied and repeated; diffusible stimulants employed upon the skin, and thrown into the stomach and rectum; and lastly may be mentioned the influence of electro-galvanism.

To call attention to the treatment to be employed in cases of poisoning by individual agents, as strychnine, opium, etc., will require separate consideration at another time.

TREATMENT FOR TYPHOID FEVER.

BY T. C. MILLER, M. D.

There is scarcely a disease that is treated so variously as typhoid fever. This diversity may arise from a lack of sound views of the essential cause of the disease. At the present day the profession is pretty nearly divided upon the question of its being a blood or nerve disease; while a respectable number of practitioners are wont to advocate, that if one is deranged the other must be. Unquestionably the prime cause of the disease is the presence in the blood of some miasmatic influence of animal origin, which, by its peculiar poisonous qualities, depresses greatly the nerve forces. Be these views as they may, the phenomena or symptoms of the disease are familiar to every practitioner; and the ruling inquiry is, how shall I manage the disorder so it may terminate favorably in a great majority of cases? We hear of Dr. A's beginning with an emetic, and following that by a purgative; but such treatment is known to prove injurious in almost every instance from its relaxing, exhausting nature; Dr. B. sweats his typhoid patients, and declares as a reason for his plan, that the virus of the disease is thus washed out through the skin; Dr. C. administers Dover's powders to allay nervous irritability, and turpentine to act as a stimulant or depurative, and claims a recovery of nine-tenths of his patients; Dr. D. is distrustful of every kind of medication, and leaves his patients to die or live as circumstances may decide. Other doctors pursue more than as many different courses, and few are willing to admit any but the best of success.

Now the most I can do is to give the treatment commonly adopted by me, with the hope that it may in some instances, take the place of a less rational course. When called early, and I find the patient oppressed with uneasiness at the stomach, I give in tablespoonful doses, in infusion, the compoud powder of rhubarb and potassa, and repeat the doses every hour until those symptoms have abated. I then give the tincture of gelseminum with the muriate of quinia or sulphate of cinchonia, in ordinary doses until the disease yields, or the medicine is no longer indicated. In the sthenic type of the disease the veratrum viride may be used; but aconite operates better in the asthenic. It hardly need be mentioned that plenty of fresh air and simple drinks will be in constant requisition.

I have found the chalybeates to operate favorably in this disorder, and have availed myself of Rademacher's formula:

℞. Tinct. Ferri acetici, f℥j.
Aquæ destil., f℥viii.
Acaciæ mucil., f℥j. M.

Dose a tablespoonful every hour. And if diarrhœa supervene I give the oil of sweet almonds. Furthermore, if there be severe pains in the head I use less of the tincture of iron, and let its place be supplied in the mixture with the tincture of stramonium.

I am also in the habit of giving draughts of chlorinated water, and althea in decoction. A wet cloth should be kept constantly over the cœcum; and if there be much pain and tenderness in the bones, I use anodyne and narcotic fomentations.

If there be present delirium I apply cold to the head; and if there be catarrhal symptoms, tepid applications of vinegar and water do best; and dilute muriatic acid proves serviceable in either case.

When a lung affection becomes complicated with the typhus symptoms, as is often the case, I give aconite, diaphoretic medicine, and mucilaginous drinks, and pack the chest in wet flannels.

If ulceration of the intestines be suspected, I fail not to give the prussiate of iron, or the clorinated tincture, suitably diluted; and chlorinated injections may be used with hope of success in checking the ulcerative condition. As a nerve tonic and restorative during convalescence, I administer a dilute acetic tincture of zinc. This preparation of zinc often will relieve delirium and diarrhœa in a surprising manner. Vegetable charcoal is often given to check a diarrhœa, and in combination with it I use tannic acid with great benefit.

Let the patient's skin be cooled often with water, but the body should not be bathed oftener than is necessary to abstract the feverish heat.

Quinia is too often given in the treatment of typhoid fever, unless the patient be affected with a malarious influence of an intermittent character. Believing that a reason will be readily seen for the use of every remedy herein advised, I will excuse myself from going into a more detailed account of the treatment pointed out. Idiosyncracies and peculiar influences must always modify any course of medication, and he is fortunate and wise who can fulfil every indication in the management of this subtle, and too often fatal disease.

THE CORPUSCLES OF PACINI.

TRANSLATED FROM THE FRENCH BY PROF. J. KING.

What are the corpuscles of Pacini? We are about to describe them. What are their uses? We do not know; and the mystery which surrounds their destination is not less than the interest which they have excited.

It has been stated that our best anatomists have suspected the corpuscles of Pacini to be true electric organs, and that they are found in great abundance in man. If I add that these corpuscles are met with in our lands, is it not a matter of wonder that after having been for several centuries the object of the study of our most illustrious anatomists, this human body, of which thousands of specimens are yearly submitted to the scalpel, could in the middle of the nineteenth century furnish such a discovery?

The corpuscles of Pacini take their name from their discoverer, Filipo Pacini, a physician in Pistoria, (Italy,) who first observed them in 1831. Soon after which, Messrs. Andral, Camus, Lacroix, Cruvelhier, French physicians, also detected them. Messrs. Henle and Kolliker have also written an excellent treatise upon them.

They have been found at first in the adult man; then among newly born infants, and even in the fœtus; also in domestic animals; the monkey, the dromedary, &c. M. Herbst, a German anatomist, has detected them in birds. I do not know whether they have been observed in fishes and amphibious animals.

They are distributed throughout the system, and in its deep seated tissues. They are found, especially in the cutaneous nerves of the hands and feet; in the sacral plexus, and crural nerve; in the solar plexus and the nerves which emanate from it, as well as in the neighboring plexuses, &c. They are numerous at those points where the nerves separate to furnish branches to the fingers and toes. The omentum of the cat is furnished with an abundance of them.

Each of these corpuscles is divided into two parts; the corpuscle properly so called, and a rounded peduncle by which it is attached to a nervous trunk.

The corpuscle is elliptical, whitish, shining; their average length in man, is from 0.8 to 1.2 of a line; and their breadth from 0.45 to 0.6 of a line. They have been found nearly two lines in length according to Pacini; the largest is situated toward the termination of the metatarsus and the metacarpus, the smallest in the ends of the fingers.

Each corpuscle is composed of a variable number of membranous capsules, enclosed within each other, forming concentric layers. Within these capsules is enclosed a serous liquid which forms nearly three-fourths of the volume of the corpuscle. This fluid is very limpid and transparent, and in man is slightly tinged with yellow. It has some analogy with the white of egg and the serum of the blood. The peduncles are composed the same as the corpuscles, of concentric layers which resemble so many small tubes enclosed one within the other. They are formed by the prolongation of the layers of the corpuscle, and contain no liquid. The Pacinian corpuscles are attached by their peduncles to the nerves, from which they are situated at a greater or less distance. A single primitive nervous fibre enters by the peduncle in the central cavity of the corpuscle where it terminates not far from its peripheral pole, in a straight or curved line. These bodies are also provided with vessels which penetrate into their interior, without however extending so far as the group of central corpuscles. The corpuscles are sometimes isolated, and sometimes agglomerated. Henle and Kolliker have counted from 150 to 300 in a single one of the extremities of man. Two hundred, and even more have been found in the omentum of the cat. They were first observed by Pacini in the nerves of the hand, and he considering them as indurations of the cellular tissue—attached but little importance to them, and passed them by. M. Cruvelhier, on his part, viewed them as the result of external pressure, having found them only in the face, palms of the hands, and under the soles of the feet. The discovery of these corpuscles in the newly born infant and in the fœtus, and their presence in the deep seated parts of the system, rendered this explanation inadmissible. M. Andral supposed them to be ganglions of touch or feeling, an unwarrantable opinion, seeing that these small bodies are only in juxtaposition with the nerves.

Pacini entertained the idea that these corpuscles were pathological products, and consequently adventitious to the nervous system; he could not explain them otherwise, as these bodies being so numerous, had escaped the notice of all previous observers. But the constancy of their presence constrained him to abandon this hypothesis. Having found these corpuscles among animals, he thought of comparing them with bodies already known and finally supposed he had found their analogues in the electrical apparatus with which some fish are endowed. This opinion was also adopted by Henle and Kolliker. They based their views on certain resemblances of organization between the corpuscles and the electric organs, particularly those of the torpedo. Both consist of several distinct concentric layers, separated by a fluid. In the absence of direct experiments, nothing is less certain than this resemblance; but especially is nothing less admissible than the existence of certain organs proper to certain beings, and which have no analogues in any other portion of the species. The anatomical discoveries of this age have accustomed us to consider organization from a point of view which would not admit of such a supposition.

All that we can admit is, that bodies common to a whole family of beings, may be distributed among several of them under particular forms, and become unusually developed; and as soon as a body is found to exist in one part, we are authorized to search for it in others.—*L. Amie des Medicines.*

Dr. Thos. Hixley considers the central portion of the corpuscles of Pacini to be solid instead of hollow; containing no fluid between the superposed capsules, which latter are only apparent, and due to the regular arrangement of the elastic elements of the corpuscles. The bodies themselves he deems to be merely thickened processes of the neurilemma of the nerves to which they are attached; and the central nervous fibres gradually terminate as they pass into the solid axis of each corpuscle. Leydig supposes the solid central portion of the corpuscle in the bird to be the expanded termination of the central nervous fiber.—K.

POISONING BY OPIUM.

BY PROF. C. H. CLEAVELAND.

Physicians have frequently been called in haste to attend persons who have been found too ill to give any clear account of the cause and nature of the attack, or the progress of the illness: and the friends expect the attendant to be able to decide at once the nature of the illness, and the proper methods of relief.

Among the frequent causes of sudden illness of this kind, and where even a little delay in making out a diagnosis and adopting a proper plan of treatment may allow of fatal results, are the accidental or intentional administration of opium and its preparations. Hence the propriety and necessity of having the subject always familiar to the mind of the practitioner of medicine.

Often when called to a case of sudden illness, the only information which a physician can obtain to guide him, is that which *he* learns from the symptoms of the case before him, and he should be able to judge of the *cause* and probable *results* of those symptoms, that he may make use of the proper measures to counteract the injury and restore his patient; and the symptoms of a poisonous dose of any of the preparations of opium are so characteristic as usually to lead to a correct understanding of the nature and cause of the danger.

Symptoms.—When a large dose of opium has been taken, the patient will become giddy, drowsy, with a strong tendency to sleep, stupid, and if the quantity of poison which has passed into the blood be sufficient, there will be perfect and complete insensibility. All the various avenues to the brain—all the nerves of the special senses, as well as the brain itself, appear in a *sleep*, and the patient lies motionless, insensible to pain, to smells, to sounds, and with his eyes closed. When in this condition he can be roused for a moment by any violent impression made upon the organs of special sense,—by pain, a loud noise, or pungent odors applied to his nostrils ; and when thus aroused, he appears like one half awakened from a profound slumber ; and like a sleepy person can be made to answer questions, but quite soon falls back into his former stupor.

When the dose of poison has been larger, or the system has become more impressed by it, in addition to the somnolent condition as above indicated, there will be stertorous breathing, accompanied with a sleep more profound, with extreme difficulty if not impossibility of rousing the patient. Not only are the avenues to the brain locked in sleep, but the brain itself becomes buried as it were, in slumber. The splanchnic nerves also seem affected with the poison. The pulse, which at first was small, *quick* and irregular, becomes in this stage full and slow. The breathing also is slow as well as stertorous. The skin occasionally becomes cold and pale. The pupil of the eye usually becomes contracted, but not by any means always so ; but the eye like the other organs of the special senses becomes unimpressible by its natural stimulus, even to entire insensibility.

In this stage, the general expression of the countenance is placid, but quite pale and death-like, and the lips are dark, and filled with venous congestion, the eyes have a heavy look, and the general impression given by the face is that of the cessation of all vital activity.

When a large dose of opium or of its preparation has been taken, it frequently produces vomiting, and often diarrhœa. When the vomiting occurs early, before enough of the agent has been absorbed into the blood to produce stupor, it favors recovery, and may be esteemed favorable. But as is too often the case, if vomiting has been delayed until somnolence has commenced, it may and will tend to expel such of the poison as remains in the stomach, but will not remove it from the general circulation. Diarrhœa can do no good, but is usually an indication that the system has been placed fully under the depressing influence of the opium. Anything which depresses greatly the nervous power of the splanchnic nerves, may cause diarrhœa. The well-known influence of fear may be cited as a familiar illustration. The nausea and diarrhœa, with lassitude, and loss of appetite, which follow on recovery after an over-dose of opium, are simply indications of the severity of the impression made upon the splanchnic nerves and the injury which they have sustained.

When the contents of the stomach have been expelled, they usually have the *odor* of the opium, more or less modified by other odors given off by the ejected substance; and this odor, if observable either in the matter vomited, or in the breath, is a valuable diagnostic aid.

As the brain and spinal cord get under the controlling influence of the opium, the muscular tissue is relaxed and flabby, the lower jaw drops down, and the face takes on more of the look of death. The unstriated muscles also, which are usually under the control of the splanchnic nerve, become relaxed as that nerve feels the depressing influence of the opium. The arteries and the heart cease to contract with force, and the pulsation becomes feeble, or entirely ceases; respiration is not performed with vigor, and the sphincter muscles are unloosed. This extreme prostration of the splanchnic nerves, and relaxation of the unstriated muscles, are more noticeable in children than in adults.

All the eliminating glands and surfaces, with the exception of the skin, also feel the sleep-producing power of opium, and as they are lulled to repose their function is lessened. Hence all the secretions with the exception of that of the skin, are arrested by an over-dose of opium. Even in ordinary doses, a similar but less marked effect is produced upon the secreting glands and surfaces; and hence the opiates are often resorted to for the purpose of checking secretions which are too profuse. In cases of poisoning by opium, while the entire system seems to be put completely to sleep, and all the other secretions have ceased to flow, the cold skin is often covered with a profuse perspiration.

Length of time after the opium is taken, before symptoms of poisoning are manifested.—This varies greatly in different cases, and from various causes. If the preparation is in a fluid form, as laudanum, paragoric, or any solution of opium or morphia, and the stomach is in a condition to allow speedy absorption, total insensibility may occur in fifteen or twenty minutes. Usually from thirty to forty minutes will elapse, even under favoring circumstances, before symptoms of poisoning will be markedly manifest. When the drug has been swallowed in a solid form, as in pills or in powder, a longer time will elapse, as from half an hour to an hour. If the stomach contains ingesta in which the powder or pill becomes involved, several hours may elapse before the poison will be dissolved and absorbed in sufficient quantities to produce symptoms of poisoning.

Size of dose to prove fatal.—This must vary greatly with the varying conditions of the patient, as regards age, sex, occupation, health, and constitution. Young persons are remarkably susceptible to the influences of the narcotics; and instances are recorded by various writers, showing fatal results on infants of very small doses. Beck says, I knew a child several months old, to be destroyed by ten drops of laudanum. Prof. Hamilton has given two cases where four drops of laudanum caused the death of children some months old. Dr. Merriman knew a child thrown into deep stupor by one drop of laudanum. Dr. Christison states that three drops of laudanum destroyed a child fourteen months old. Dr. Ryan has known one drop of the sedative liquor of opium to narcotize an infant. Dr. Pereira has seen one drop produce a powerful effect. A single drop he saw destroy an infant. Dr. Woolen saw a child die from the effects of one drop of laudanum.

Dr. Ramish saw a child four months old nearly killed by one grain of Dover's powder. Opium should not be given heedlessly to a young person, and may and should be avoided in nearly all cases. It should never be used except when there is an urgent demand for it, and only under the direction of a competent physician.

The *form* of the preparation is a matter of no small importance. The *syrup of poppies* is never of uniform strength, and is liable to ferment. The only way to be sure of uniformity of dose, is either to make use of some of the salts of morphia, or of a saturated tincture of opium.

Adults.—Dr. Sharkey knew a man aged 32 years, to die in a convulsive fit, after taking two pills containing about two and a half grains of the extract of opium. Dr. Skae knew death to follow two drachms of the tincture of opium, taken by a robust man fifty-six years of age

Time of Fatal Termination.—As will be readily perceived, the period of time which will elapse after a fatal dose of opium has been swallowed before death will ensue, must be very indefinite. Most cases, if not interfered with, will prove fatal in from six to twelve hours. Usually those who are roused from the stupor, will eventually recover; but some will afterwards relapse; or the system may have received a fatal injury. Cases are on record where death ensued earlier than the sixth hour. Dr. Christison mentions a case where death ensued in three hours. Dr. Beck records a case of death in two hours and a half. A soldier died in three quarters of an hour after swallowing an ounce of laudanum by mistake. But instances are also on record, where life was prolonged to twenty, twenty-two, and even twenty-four hours, which had a fatal termination at last.

Diagnostic Symptoms.—The peculiar symptoms by which a case of poisoning by opium can be distinguished from illness produced by other causes, may be drawn from the symptoms already enumerated; but may be briefly recapitulated.

Opium produces a relaxation of all muscular fibres and contractile tissues; a tendency to sleep, *of all the nerves*; usually a contracted pupil, relaxation of the sphincter muscles, constipation, and an arrest of all the excretions except the cutaneous exhalation.

The other narcotics do not produce contraction of the pupils, but some of them cause; dilatation and while they relax the muscles, they *do not* arrest the secretions as opium does. None of them produce the profound sleep caused by opium.

Opium *does not* produce tetanic convulsions, delirium, inebriation, syncope, gastro-intestinal, or pharyngial irritation, and topical numbness, which follow the administration of the inebriants or deliriants.

Tobacco, lobelia, and digitalis produce some of the effects that follow the administration of opium; but they also produce irritation of the stomach and bowels, and they *do not* induce sleep, the peculiar manifestation of opium.

Hydrocyainc acid acts much more rapidly, and its influence passes away quickly. It also produces convulsions, and its peculiar odor can be discovered in the breath. Cannabis Indicus causes catalepsy, and in most regards differs from opium. Vinous and alcoholic liquors produce inebriation, as well as sleep; but the sleep is seldom profound.

Conium is seldom used to produce intentional or accidental poisoning as a medicine, but its action in some regards so closely resembles opium, that it demands special notice. Conium produces coma, a slow pulse, small and hard; cold extremities; a *bluish* color in the face, with the capillaries distended as if by strangulation; gradual paralysis, with falling of the jaw, and *dribbling* of urine; which is arrested by opium. Sometimes conium produces delirium, convulsions, pains, and madness.

Treatment.—When called to treat a case of this nature, if the patient be not so far under the influence of the poison as to require immediate stimulation to sustain the departing vitality, the first thing to be done, will be to evacuate the stomach thoroughly, that any of the opium which has not passed into the circulation, may be removed before time is allowed for further absorption.

Emetics have always been recommended for this purpose, and properly so; but sufficient discrimination has not been manifested in their selection. Ipecacuanha, lobelia, or tartrate of antimony, should never be selected, and only resorted to as matter of dread necessity in the absence of other more efficient and rational means.

All emetics which produce nausea are slow of action, usually requiring twenty or thirty minutes after their administration before they produce emesis, which time may be sufficient to lead to a fatal termination, or allow absorption of enough of the poison to prove fatal. It may be as well to consider it an axiom, that:—

Tartrate of antimony, *wine of antimony*, all preparations of *ipecacuanha*, *lobelia*, and *tobacco*, or *any other agent which induces nausea*, should be entirely discarded in the treatment of all cases of poisoning.

These agents, as has been said, are all slow of action—all require the stomach to be freely supplied with fluids to ensure certainty in their action, which fluids *may* dissolve more of the poisonous agent, and thus fit it for absorption,—will bring the fluid in contact with a larger amount of surface of the distended stomach, and thus lead to a more rapid absorption; and they all, by their action on the stomach, *favor* and *assist* the absorption of poison into the system.

Emetics should be selected which act *promptly*, that no time may be lost; and those which do not cause nausea, and thus favor absorption.

Among the agents which can usually be readily obtained, and are, besides, the ones to be chosen, are *common table salt*, and *common ground mustard*. Among other agents may be named, *sulphate of zinc*, *alum*, and *sulphate of copper*. Each of these will be found to be prompt, efficient; and each will cause a copious flow of blood-serum into the stomach, and thus arrest absorption, and perhaps carry into the stomach a part of the poison which has already been absorbed into the system.

In preparing an emetic of table salt, it will not do to be too cautious as to the quantity used. In all cases of poisoning by opium, the poison has lessened the impressibility of the stomach to the action of medicines, and a larger dose than ordinary, will be required. Put two or three large spoonfuls of ground salt in a glass or cup, with just enough water to suspend the salt when well stirred up—not more than half a tea-cupful; stir it well, and pour it down the throat of the patient. Give no other drink. If the patient does not vomit in two or three minutes, repeat the dose.

Perhaps the stomach is too much under the influence of the opium to act, and it may be necessary to rouse the patient by shaking him, or in any way awaken him from stupor.

Often it will be found necessary to rouse the stomach, which can be done by mixing two or three teaspoonfuls of ground mustard with a small quantity of water, and causing the patient to swallow it. The stomach may be so *put to sleep*, that even the irritation of mustard will not rouse it to contraction; and the patient will need to be awakened as much as possible by agitation, flagellation, or any means which are found to be adequate. Titillation of the fauces by means of the finger or a feather will not answer in these cases, until the patient is roused from slumber, as the throat will be too sound asleep to take cognizance of the foreign agent.

At times, the stomach cannot be made to vomit by any means, unless a current of electricity or galvanism be passed through it; and a machine for this purpose should always be resorted to when one is procurable.

When other means for evacuating the stomach have failed, and at all times when the danger is imminent, and it can be obtained, the "Stomach Pump" should be introduced as has been explained by Prof. Howe; the contents of the stomach removed, and then plenty of water thrown into the stomach and afterwards removed, until the viscus is thoroughly rinsed out. Then there may be thrown into the stomach an aromatic stimulant fluid, or water in which there is a little carbonate of ammonia in solution, which is to remain, to act upon the general system.

When the Stomach Pump has not been resorted to, and the patient has been made to vomit by means of common table salt, or mustard, or salt and mustard, and it is desired to keep up emesis for a little time, no more salt and mustard should be used, lest they cause a harmful irritation of the coats of the stomach, and then sulphate of zinc is the best agent to employ, although the sulphate of copper may answer instead. Emesis may be kept up for a time, but can do little good after the poison which remained unabsorbed, has been ejected.

When other means cannot be commanded readily, the patient may be made to swallow an acid drink, as vinegar and water, or lemon-juice and water; and afterwards, a bi-carbonate or carbonate of soda or potassa, that by the union of the alkali and acid, carbonic acid may be set free to cause effervescence, and thus mechanically empty the stomach. But this is usually unsatisfactory, and should never be resorted to when other measures are at command.

When the stomach is emptied, the patient is not to be considered out of danger. The poison which has been absorbed into the fluids will continue to impress the nerves as long as it remains; and the safety of the patient will depend on his being constantly kept roused until the opium is eliminated, which may require many hours; and an increased length of time in proportion as the activity of the system is subdued. Twelve, fifteen, and even twenty-four hours may elapse after opium has been swallowed before the patient can be allowed to fall into a slumber without danger.

Opium is mainly eliminated from the system through the skin and lungs. Hence such agents as increase the activity of the eliminating power of these surfaces, and at the same time rouse the whole system, will be of great service. Drinks of water or nourishment, in which there is dissolved a carbonate of ammonia, or an essence of some of the aromatic oils, as peppermint, spearmint, horsemint, or of the balms, will always be found useful. So will vapor baths, or hot-air baths, or the application of heat and moisture and friction to the surface and extremities.

Artificial respiration should be resorted to, with inhalations of ammonia, whenever the natural respiration flags. This can be greatly aided by the use of galvanic apparatus. Dashes of cold water upon the head, face, and chest have been resorted to for the purpose of rousing the nerves. All manner of means which will increase the present activity of the patient and not be productive of future injury, should be resorted to. Vinegar, lemon-juice, tartaric acid, strong infusion of burned coffee, decoction of galls, belladonna, and chlorine, have all been spoken of as antidotes for opium. It has not been sufficiently well established that any of these except chlorine, are so active antidotes to opium after it has passed into the circulation, as to justify us to place much dependence upon them. While they may be resorted to, the use of the other measures already detailed should not be neglected.

Belladonna has been reputed so sure an antidote to opium, that in some instances which have come to the knowledge of the writer, it has been relied on to the exclusion of other and better authenticated measures. Large quantities were used in a recent case, so large as to prove dangerous to a well person; but unfortunately the patient died in a short time from its administration. Some evidence of its value has been accumulated, but not enough to give it more than a secondary position. It may be resorted to, but by no means to the exclusion of other measures.

In cases of poisoning with opium and the other narcotics, we should remember, that to expel the poison from the stomach, is the first thing to be done; and to keep the patient properly roused, and the eliminating functions of the lungs and the skin in a state of constant activity, until the system is freed from its presence, the next. To ensure this, the activity of the respirations and of the circulation should not for a moment be allowed to flag, until the poison is entirely removed.

Artificial respiration, the application of hartshorn to the nose, shaking, causing the patient to swallow aromatic drinks, stimulation to the extremities and the surface generally; and all means should be brought into requisition for many hours, if need be, which will ensure and expedite elimination.

Galvanism has been applied to rouse the lungs and heart, as well as the stomach and general system to activity; and in some cases where other agencies have been wholly or partially powerless, the galvanic machine has kept up respiration and circulation in very hopeless cases, until the organs were enabled to act unaided; and lives have thus been saved, which could not have been preserved by any other means. No case where the galvanic current can make the lungs and heart resume their action, should be abandoned ; and even where vitality seems entirely extinguished, life may be preserved by a proper use of this agent.

Post Mortem Examination.—Sometimes physicians will be called upon to make post mortem examinations to determine the cause, or causes of death; and the people will expect them to determine with certainty. Where death has been caused by opium, there are no *positive* indications of the fact in the appearance ot any of the internal organs, and resort must be made to chemical tests for its presence.

Opium cannot be discovered by any chemical tests known. Its odor may be perceptible, or disguised by other smells. But some of its constituents as morphia and meconic acid are discoverable by chemical tests, and they should be searched for in the contents of the stomach, and in the fluids of the system.

Morphia presents, as its distinguishing characteristics, the form and appearance of its crystals which are fine prisms. On heating them, they melt, turn dark, and run like resin. It is far less soluble in water than its salts. Nitric acid changes it to a *deep orange red.* Colorless sulphate of iron turns a solution of morphia or its salts, to *inky blue*, which blue color is destroyed by acids. Sulphuric acid changes morphia to a *light pink* color, and this again is changed by the chromate of potassa to a green. Meconic acid may be changed to a *deep* red color by per-muriate or per-sulphate of iron ; and it is owing to the presence of meconic acid that a tincture or infusion of opium, or any liquid containing any meconate of morphia, will be changed to a deep red by the use of these salts of iron. Except by these means mentioned, the presence or absence of opium in the stomach or fluids of the body, can not be determined with certainty.

A SCALD, WHAT CAUSED THE DEATH?

BY A. LOGAN, M. D.

On Tuesday evening, March 27th, a gentleman called at my office and informed me that his child, aged two years, had been scalded in the morning by falling into a tub containing boiling water. I inquired what had been done for its relief, and was informed that "Perry Davis's Pain Killer" had been applied to the arm and a small part of the breast which were scalded; and that after its application, the child immediately ceased crying, and appeared to rest very comfortably; its appetite being unimpaired, its bowels open, and apparently no tendency to strangury, with a very small part of the scalded surface blistered.

It was not deemed necessary for me to visit it. I directed that a poultice of flaxseed be applied to the blistered part, and a week infusion of arnica flowers to the unabraded part of the scalded surface.

On the following morning at two o'clock, I was called to visit the child, and went immediately; but it had died before my arrival.

CONVULSIONS IN CHILDREN.

BY N. HASTINGS, M. D.

One of the first cases that came under my care after hoisting my "shingle," on entering the arena for patronage as a competitor among practitioners of medicine, was a child in convulsions. Such a case is always overwhelming to the young and inexperienced physician. It does not avail much that he has heard his Preceptor speak of treating convulsions with antispasmodics, and stimulants, and anæsthetics; or that the professor of "theory and practice" has discoursed for days upon the pathology and treatment of the various forms of convulsive diseases; or that the "books" are crammed with elaborate essays upon paroxysms just like the one in hand:—I repeat, all such instruction avails little for a fledgling, when suddenly started up by the summons of the excited messenger: "Doctor, come quick, the baby is in a fit." Thus I was summoned, and upon arriving at the house, all was in confusion—every body was there, and expected I possessed some charm that would immediately dissipate this fell incubus. I felt my responsibility and endeavored to "drum up" the few wits that were left me after the summons. What can I do, was the question with me, for I knew not the cause of the difficulty, *nor what was good in such cases.* The mother beseechingly cries, "can't you do something, doctor!" Now I felt I must do something. I hastily felt in my pockets, and drew out a vial, as if searching for the specific, not knowing all the while what I was seeking for. I had some antispasmodic tincture at my office, but I had failed to take it with me. I mixed with water some lobelia, knowing that was good for everything, and it did not fail in this case; for, before I applied it to the child's mouth the paroxysm passed off. Was'nt I relieved in heart; yet I wished I had been a little quicker, that my medicine had won the credit of effecting a cure. I left the remedy, however, after adding something, I know not what, to show that I understood my business, and to convince them that which was good to bring a child out of a convulsion, should not be continued to prevent another without some alteration. Now my first case of convulsions was terminated—successfully too, for the child was soon prattling as sportively as ever. I congratulated myself, but for what? Had I cured the child? no: had I ascertained what caused the convulsion? no; was my remedy useful in such cases? I could not tell. What advantage then had I derived from this patient. Why, much I can assure you. I obtained a fee; secured the good will of all present; notoriety which is desirable for a physician; and last but not least, I was aroused to devote myself with renewed zeal to the investigation of such cases.

All are aware that the infantile nervous system is exceedingly impressible, and susceptible of a convulsive state when subjected to certain exciting causes. Among the most frequent of these is *irritation in the digestive tube.* Food of an indigestible nature, or if digestible, in too great quantities, or worms in the intestinal track, are common sources of such irritation. The stomach of the child, when in good condition, will digest rapidly almost any article of diet; yet the slightest disturbing influence from a mental shock, or irregularity of the circulation excited through atmospheric vicissitudes, may suddenly arrest the digestive process which has been going on well up to that time. Suddenly, what a few moments before was a placebo to the nerves, is now a powerful irritant. In most cases the conservative forces of the system cause the irritating substances to be thrown off by emesis, yet the paralyzing effect of sour ingesta is so great that too often the food fails to be dislodged.

Dentition is another common cause of convulsions in the young. In *all* children the period of teething is known as a precarious one. Add to this a predisposition to convulsions from peculiarities of constitution hereditarily or otherwise derived, and the paroxysmal state does not remain unaccountable. To understand why irritation of the gums should induce convulsions sooner than irritation of any other part of the body, requires a better knowledge of nervous distribution, the connection of the nerves anatomically and sympathetically, and of their reflex action, than is commonly possessed. I do not pretend to be wise upon these subjects; but by attentive observation I have been able to satisfy myself that dentition may occasionally be invoked as a cause of the difficulty in question.

When the digestive tube and its appendages are not at fault, the cause of convulsive paroxysms may generally be referred to the cerebral circulation; to some pathological state of the meningeal envelopes of the brain, or to some disturbance of the nervous centres, whose real condition is not yet understood. If the fault lies with the cerebral circulation, the primary cause of this is in the blood itself, which may not be of the proper consistence to afford that stimulus to the nervous centres which is required in order to exert a controlling influence over the sources of the circulation. The brain and spinal cord are rendered exceedingly irritable by the abstraction of blood. Every one has noticed how a slaughtered animal will flounder in convulsions after a great part of the blood has been abstracted through a cut throat. These convulsive efforts come on from *exhaustion;* the brain feels a lack of its natural and essential stimulus. Convulsions, then, may be said to arise from anæmia or exhaustion; and I am fully convinced that many cases of convulsion come on from an anæmic condition of the body. This doctrine may be considered contrary to orthodox principles, which declare we must *bleed* in the treatment of convulsions; but who cares for the cry of "heresy" in these days of progress. As has been intimated, meningitis may be the cause of convulsions. The meningeal inflammation may have existed for days without attracting attention. It may have been induced by a blow upon the head, which for the time was not regarded as severe; but the inflammatory action once excited, kept on with slow progress, until from thickening of the meninges themselves, and effusions of lymph and serum such as usually follow such action, the irritation, depending in part upon mechanical pressure, led to convulsive action.

The *symptoms* of convulsions are too familiar to every practitioner to need a full description. An attack may come on without any premonition, but more commonly after dulness and indisposition; the child falls down in a state of insensibility, exhibiting all the while a twitching of the muscles, especially those of the eyelids, nostrils and mouth. The eyes become turned up and fixed, the face assumes a livid appearance; and not unfrequently there will be frothing at the mouth. The state of the iris will be observed to vary during the attack; at first, the pupil may be contracted, and then become preternaturally dilated. The rigid condition of the muscles of the neck and thorax produces a difficulty of respiration. The symptoms, on the whole, are such as to excite alarm, and the prognosis is rather unfavorable. If the paroxysm be slight, all the symptoms pass away in a few minutes; but in a majority of instances, the first attack is either followed immediately by another, or it continues for some time, the child recovering gradually its consciousness, the stupor lasting for hours. In bad cases, paroxysm will succeed paroxysm, until death ends the scene. From the statistical returns of mortality in the large cities it will be seen that a large per cent. of deaths in infancy is set down to convulsions. But so far as my observations extend, a majority of the cases of infantile eclampsia terminate favorably.

Treatment.—This must depend much upon the probable causes and symptoms. I have succeeded well by giving an emetic in cases where the difficulty seemed to depend upon irritating substances in the stomach. It is not easy, however, to administer an emetic to a patient in convulsions. When the patients are unable to swallow, a nauseating enema may have the desired effect. Lobelia thrown into the rectum rarely fails to excite emesis, and acts almost as promptly as when given in the usual way. If no emetic effect be produced, it is well in most instances to wrap the child in a blanket wrung out of warm sinapised water, over which dry blankets are to be packed to prevent the escape of heat. The revulsive action produced by the wet pack will often exert a very salutary effect, and the continuance of it serves to relax the constringed tissues, and divert the blood from the nervous centres to the surface of the body. While the child is in the blankets, cold water should be applied to the head, especially if there be an unusual determination of blood to it. If the convulsive action does not yield under this treatment continued for half an hour, chloroform in moderate quantities may be directed to the child's nostrils. The quieting effect of this agent, together with its other peculiar effects, render it one of the most valuable in the management of convulsions. It brings the patient into a gentle sleep which may last until no farther danger is to be apprehended from that attack. I have administered chloroform twenty-five times to children laboring under an attack of eclampsia, and in most instances with the most happy effects; and in no case have I observed that it had an injurious effect. So much confidence do I now place in the agent, that I should feel at a loss without it. The patient must be placed during treatment not on the back, as the tongue might fall against the epiglottis and shut off the breath, but on the sides or face. After a child has recovered from a convulsion, means should at once be used to counteract another spasm, which is likely to occur at some future time, the same or a similar cause existing. And then, it is well known that one attack of spasmodic disease lays the foundation for others. If the cause depend upon worms in the digestive tube, which is the case in a great number of instances, it is to be removed by the administration of vermifuge medicines. I find, however, it is difficult to remove worms so effectually that they never appear again. So great is the power of reproduction in these parasites, that it needs a prolonged course of medication to entirely free the bowels of them, and overcome the state that favors their origin and growth.

In anæmic cases, some of the agreeable preparations of iron should be given until a change of habit is effected. The syrup of the iodide of iron is one of the preparations I have found useful. I have also used with beneficial results, hydrocyanic acid mixed with some syrup of a simple character, in doses adapted to the age and impressibility of the patient. It seems to exert a controlling influence over the nervous system, counteracting the tendency to a repetition of the attack.

When convulsive movements depend upon dentition, the state of the gums should be observed, and if they need scarification, it should be performed from time to time. But the "cutting" of the teeth will not put an end to that train of unpleasant symptoms which has been established. Nervines, carminatives, stimulants, neutralizing agents, and mild astringents will be required to restore the system. To name each remedy I have used would occupy too much space. I have therefore, referred to classes.

SYPHILITIC MOUTH AND THROAT.

BY A. B. JACKSON, M. D.

Syphilitic ulceration of the throat does not always take the lead in the many forms in which constitutional venereal disease will appear, but is likely to occur during a period varying from six weeks to as many or more months after the primary infection. The absorption of the virus and its existence in a latent state for an indefinite period, are attended by no unpleasant sensations. A feeling of languor or feverishness, with impaired appetite, and depression of spirits, may be experienced in individual cases. The first the patient may observe after the disappearance of chancre from the genitals, or the introduction of syphilis into the system in the *secondary* form, will be a huskiness of the voice, and soreness of the throat,—symptoms that not unfrequently accompany influenza. Not long after, with the mouth extended before a mirror, if the throat be viewed, a yellowish or copper-colored ulcer will be noticed on the tonsils, pillars of the fauces, velum, or on some part of the boundaries of the pharynx. This will have an irregular edge, with a tenacious, pultaceous matter adhering to its surface. If the finger be placed upon and around it, the feeling communicated will not be essentially different from that received when manipulating a primary chancre. As a general thing the middle of the sore will be excavated, and the walls or boundaries of the excavation will appear hard and unyielding like ordinary scirrhus deposits. Many ulcers of the same character may form in the fauces, which though at first concealed behind the half arches, tonsils, velum, or uvula, will in progress of the ulcerative process spread until the whole cavity is mixed up in one horrid mass of disease. At this time the patient will exhibit symptoms of uneasiness and distress, and not unfrequently presents the most striking picture of wretchedness that mortals are called upon to witness. He can neither swallow food nor drink; nor even spit the viscid saliva which hangs to the jaws in ropes. His breath becomes loaded with offensive effluvia; a sensation of disgust pervades the mind, creating irritability of temper and a loathing of society. If the disease be particularly violent and destructive, (phagedænic,) the soft parts of the posterior boundaries of the mouth will be rapidly lost by the ulcerative process, producing inability to enunciate distinctly, or to swallow without regurgitation through the nose. Such cases are uncommonly severe, yet not without example. In ordinary instances a very indolent ulcer of variable size forms in the mucous membrane of some part of the fauces, which may be accompanied with more or less extended discoloration. This may remain painless and stationary for a number of days or weeks, and only attract attention from the difficulty excited in deglutition, and then advance with fearful rapidity over the arch or curtain of the palate, destroying the uvula in its course. By extension of the pharyngeal inflammation through sympathy of continuity, the walls of the Eustachian tube become swollen and the passage obstructed to such an extent as to impair the sense of hearing.

When the velum appears thickened, there is reason to suspect an ulcer has formed on its posterior surface. This may produce a preternatural opening in the soft palate, greatly modifying the sound of the voice. And it is not unfrequent that the disease involves the hard palate and the spongy bones of the nasal cavities. When the disease begins to extend itself in the nose, there is difficulty in distinguishing it from other difficulties of that organ, unless the existence of a venereal taint in any patient be sufficient to excite apprehensions of a breaking out of the disorder in the throat and the contiguous structures. After the disease has existed for some time, the patient feels a fulness or stuffing in the throat, which is succeeded by the formation of hard crusts or scabs in the nose; they may give way at times and be discharged, yet others will soon form in the same places, to be in turn discharged and reproduced. In course of time a very fœtid discharge issues from the anterior nares, and the breath gets almost pestiferous. All the cavities, as the sphenoidal, ethmoidal and frontal sinuses, communicating with the nose become in the progress of the disease affected, producing a sense of heaviness in the forehead, dimness of vision, especially when the eyes are confined to small objects as in reading, periodical headache of a severe kind, heat and a feeling of pressure on the top of the head, and other symptoms that accompany a chronic nasal catarrh. Now if this state of the disease be not overcome, the bones which give form to the nose, yield and come away; the arch of the organ falls in, and a very ugly and striking deformity remains for life. In not a few instances the hard palate or septum between the mouth and nasal cavities ulcerates, and an opening is established between the two cavities. The tongue is also the seat of venereal ulceration. An ulcer appears somewhere about the base of the organ, which may become extremely painful to the touch and present a deep discolored and foul aspect, and be indisposed to granulate and heal kindly. When such an ulcer is found upon the side of the tongue, has a callus, scirrhus-like feeling, and its discharge has a dirty yellowish appearance, a suspicion may be excited that a cancerous sore is making progress. The real nature of the disease has to be ascertained from collateral evidence, the history of the case, and such events as render assistance in forming a correct diagnosis in obscure cases. To pronounce at once and emphatically as to the real pathological condition when no positive venereal symptoms were manifest, would indicate a disposition to decide a question without taking into consideration all its bearings. A cancerous affection does not ordinarily appear until about the middle or latter period of life; a venereal may exist earlier. The treatment which will cure a syphilitic ulceration has no marked effect upon a cancerous ulcer, unless it produce aggravation of the disease. The gums are subject to ulcers of a fungoid character, and to determine whether the disease be venereal, cancerous, or depend upon some more simple cause, requires extraordinary diagnostic acumen. It is safe to affirm that a syphilitic ulcer of the gum does not differ from a venereal sore any where else. In regard to venereal ulcers upon the lips, it has been observed that the *upper* lip is invariably the seat of constitutional syphilitic ulceration when either is attacked; but cancer, when it affects the mouth, as constantly involves the *lower* lip and not the upper. These peculiarities are distinguishing characteristics of the two diseases, and on that account, in doubtful cases, are worth knowing. Both diseases may commence near the angle of the mouth, and from their spreading character, in time invade the surrounding tissues to such an extent as to render the case somewhat doubtful. The course then to be pursued is, to take advantage of every circumstance calculated to throw light upon the subject; not even neglecting to observe what effect a certain plan of treatment may have upon the progress of the disorder. As has been just remarked, what will cure syphilis, has no lasting beneficial influence upon cancer.

Treatment of Syphilitic Mouth and Throat.—Having become satisfied that the pharyngeal, nasal, or oral affection is syphilitic, the physician should at once put his patient under the influence of active local and constitutional remedies. And it may be here suggested to those who are falling into the lethargy of relying upon the "expectant" plan of treatment, that neither catnip tea nor pigeon's milk will cure the disease. When certain soft non-infecting chancres heal under the application of the mildest agents, and no symptoms of a systemic contamination succeed, the credulous are apt to commit the error of supposing that all constitutions and venereal poisons are alike, and that the compound syrup of stillingia is sufficiently potent to eradicate from the body every trace of the loathsome virus.

Next to inefficient medication is to be condemned the practice of feeding syphilitic patients indiscriminately with the mercurial preparations. To give mercury to a lean, pale, scrofulous patient affected with venereal ulceration in the throat, would be subjecting him to the hazard of salivation, feverish paroxysms, night sweats, loss of appetite, depression of spirits, and other ills of so serious a character as to make a speedy fatal termination pretty certain. I have many times seen an indolent venereal ulcer of the pharynx converted into a phagedenic sore of the most fearful variety, by the administration of a few grains of calomel and blue mass. Mercury will not always do this, but it is liable to do more or less mischief in certain constitutions. In other words it is a dangerous, unreliable agent to be used in the cure of syphilis, and on that account should not be resorted to. I know very well that a large class of physicians are relying upon the agent in all their syphilitic cases, and that their practice is attended with some cures: yet the same may be said of the practice of those who use comparatively inert medicines. There is reason to believe that some of the suspected cases under the patronage of either class of physicians were not venereal; others were cured by the medication and the vital efforts, for many cases of genuine syphilis will terminate favorably with almost any kind of management; and a great many others were not cured at all.

There are numerous articles named in the works on materia medica which are reputed as possessing anti-syphilitic properties. Among the most reputable of the vegetables are smilax, stillingia, kalmia, corydalis, rumex, arctium, and guiacum. On the contrary, it has not been made satisfactory that either of these articles will actually neutralize, destroy, or expel from the body one particle of syphilitic virus. We often hear and read that *combinations* of these articles done up in the form of *syrups*, will exert a powerful influence upon venereal poison (in just what way is not clearly disclosed), and can be relied on in place of harsher remedies. It is possible that a half dozen agents done up together in the form of an "*alterative syrup*" will exert some mysterious influence upon syphilis not possessed by either of the individual agents entering the compound, yet it requires aside from experimental knowledge, a large share of credulity to believe any such thing. I have used extensively the above agents, separately and combined, in the treatment of syphilis, and am not prepared to say that they have exerted any marked control over the disease. These agents stimulate more or less the glandular system, and open the emunctories of the body; but whether the venereal virus will take its passage out when thus invited, is questionable. It is recorded that Aaron cleansed the children of Israel of all their iniquities by placing their sins upon the head of a goat, and allowing the animal to escape into the wilderness. Perhaps by some such *hocus pocus* the virus of syphilis may be gotten rid of: yet this free thinking age requires that a medicine shall have more power than is possessed by a charm or philter. It is pretty well established that potassium, gold, iron, and their preparations, have a greater or less specific effect upon venereal poison. For a long time the iodide of potassum has held the first rank among the anti-syphilitics; and its reputation as such has never been questioned. It may be given in fifteen or twenty grain doses three or four times a day. Its disagreeable metallic taste may be disguised by administering the remedy in some pleasant mixture. It has been common to exhibit it in sarsaparilla, stillingia, and corydalis syrups. It may be taken in water. Gold has grown rapidly into favor as a remedy in the treatment of syphilis, though it has not been so extensively used as the potassium. There is no doubt but it possesses active anti-syphilitic properties. It needs to be exhibited in larger doses than are commonly recommended. I have given, without any bad results, of the chloride of gold and soda (the officinal mixture,) a quarter of a grain at a dose, and repeated four times a day. This agent seems to possess active solvent properties; tumors and plastic exudations lessen in size and quantity when the medicine has been administered a number of days. Iron has long been regarded as a valuable anti-syphilitic. The proto-ioduret of iron, and the potassio-tartrate of iron have been favorite preparations with Ricord. The last mentioned is now becoming quite popular. Whether it will continue to gain in favor as it has done, must depend upon its power to cure the disease it is recommended for. The per-chloride of iron exerts a more destructive effect upon the virus of a chancre, than any other known agent. And chlorinated preparations seem to exert a greater antidotal influence upon venereal poison than other combinations. The most powerful mercurial anti-syphilitic is unquestionably a chloride—the bi-chloride.

Local Treatment.—It is a common way to cauterize with nitrate of silver or potassa fusa every venereal ulcer; but I am disposed to proscribe the use of these unmanageable agents. I prefer the use of nitric or muriatic acid; either of which may be applied with a pencil or spatula of wood whittled to the proper shape. To apply the acid to an ulcer low in the pharynx, or in the sides of that organ behind the tonsils, or on the posterior surface of the velum, a stick cut into a curve towards one end is the best instrument. With this as much acid as may be needed can be used without the danger of having it spread and thereby make the ulcer larger. The piece of wood dipped in the acid may be wiped before use to get rid of any superabundance of fluid that might drip in the mouth or on the healthy tissues. Generally, enough acid remains in the wood after being wiped, to do as much cauterization as is needed. The pencil should be pressed into the ulcer to effectually cut through the viscid pus that adheres tenaciously to its surface. The applications should be repeated every day until the sore manifests a disposition to heal, when the dressing should be the per-chloride of iron and glycerine, a fluid drachm of the former, to a fluid ounce of the latter—which may be applied with a swab or a camel's hair brush. Venereal ulcers in the mouth or nose may be treated in the same way. Ulcers, or ulceration deep in the nose may be reached with fluid thrown from a syringe. The fumes of chlorine may be snuffed up the nostrils for the same purpose.

In those cases where preternatural openings are established between the mouth and nose by destruction of tho bony septum, and there being no disposition to closure of them by the vital efforts, a dentist can mould into the mouth a palate of gold which will answer to restore the voice and prevent the passage of fluids from one cavity to the other.

EDITORIAL DEPARTMENT.

MEDICAL PERIODICALS.

Periodicals are called into existence for a variety of uses and purposes; and those devoted to the interests of the medical profession have also had a diversity of origins. In a few instances, Medical Periodicals have been brought into existence for the purpose of advocating an *idea* or notion entertained by a man or set of men. Others have been established simply to instruct and enlighten the profession; and this is the proclaimed object of most whose conductors delight in calling themselves *orthodox* and *regular*. But many, in reality, owe their origin and continued existence to the aid they give to some college, clique, or publishing house.

Some medical periodicals have been started for the mere purpose of injuring a rival association or organization; or to give vent to the personal feelings of those who could not use any other medium.

As people are frequently governed somewhat by local attachments, and sympathize with those who entertain opinions similar to their own, many of those whose character and origin were not entirely unexceptionable, have been enabled to keep up a continued existence, in some instances even after the originating causes have ceased to exist.

But all the various changes, turns, and shifts which some journals are constantly resorting to, and the many loud and improbable promises of *what will be done in the future*, cannot long induce the more observant and intelligent physicians to contribute their support to those periodicals which do not prove themselves active and reliable in giving the reader ideas equivalent in value to the price asked.

It has been customary with some publishers to send out their periodicals to those whose names and address they obtained, hoping to enforce a collection of their bills as soon as they had increased to a considerable magnitude; and thus by a species of coercion, oblige the people to pay for that which they do not choose to buy. This practice is, however, less beneficial to the publisher than has been anticipated, as no one feels under obligation to pay for journals thus crowded upon them against their wishes; and the cost of collection, together with the loss of friends, is greater than most can endure.

Without doubt the frequent suspension of medical periodicals in various parts of the country, has been from these causes. Month after month the printer's bills have to be paid; but after a few years of hard struggle and continuous pecuniary outlay, the hoped-for return is not realized, and the publication ceases. This suicidal custom has also led Editors to bestow as little time and labor as possible upon these publications; for where there is little pay, there is little encouragement to labor. And, hence, as the number of paying subscribers has decreased, the "Selections" have swollen in number; until, with some journals, the "Original" department scarcely contains the announcement of the few books sent for notice by credulous but enterprising publishers.

Medical periodicals may have a continued existence as long as the interests which they subserve will give them support. Those established to aid a College, or Book Publishing House, of which they are the organ, will continue as long as they can draw upon them for support. Those started to subserve personal or party purposes, may be expected to continue as long as the feeling which led to their establishment can be kept active in those who pay for them.

But a real, live periodical, such as will win and command the continued and permanent respect and patronage of the profession, must have several characteristics fairly developed and quite apparent. To deserve and ensure permanency, respect, and continued support, a medical periodical must be conducted by men fearless in spirit, active, able and willing at all times to give a decided and positive opinion on professional matters; by men fully posted in regard to the opinions of others; never afraid to give utterance to new ideas, or unwilling to examine those which are old; granting full and honest credit to those who have or may contribute to the advancement of humanity and science; exposing ignorance, error, or pretence wherever manifested, in or out of the profession, but perhaps with more earnestness when manifested within our own chosen and honorable body.

A medical journal to merit the lasting support of the profession, should not be bound to any party, ism, or limited idea. It should take a view of medical science as broad as the universe, and be free as the wind; ready and willing to deal justly with all views and opinions, and the advocates of all partial exponents of the great humanitary science to which it is devoted. Above all petty local or party influences, it should not disdain to garner truth presented any where or by any class of men. Not to do this, is to prove recreant to the true interests of a noble cause.

A medical periodical to be successful, and do the most good to the profession, should be published at such a price that *all can afford to take it:* and to enable the publishers to afford the largest amount of matter at the least cost, *it should never be sent to those who do not* *pay for it in advance.* Any other course imposes an unnecessary tax upon those who really sustain the periodical; and fosters an unhealthy moral condition with those who get it without pay.

Long articles whether original or selected, should be avoided, if the nature of the subject treated will admit of condensation. One hour of the time of a reader of a periodical, taken for the perusal of long articles, which could have been avoided by condensation or an abstract, multiplied by two thousand, the number of readers, and again repeated twelve times in a year, amounts to 24,000 hours; and if each hour be worth only half a dollar, the large sum of $12,000 in time has been expended uselessly on a single periodical in one year. The profession can not sustain such a useless outlay.

A medical periodical which is full of vitality and originality of ideas; is fearless, and not bound to any local interests, party, clique, or ism; contains the ideas and latest improvements in the healing art; does not depend upon "Selections" to fill its columns; is courteous and manly in its tone toward those who differ from it in opinion; and offered at a reasonable price, under the management of a watchful and enterprising publisher, is sure of success.

BOOK NOTICES.

Diseaes of the Urinary Organs. A Compendium of their Diagnosis, Pathology, and Treatment. By William Wallace Morland, M. D., etc. With Illustrations, Philadelphia; Blanchard and Lea, 1858.

In the years 1855, and 1857, the Boylston Medical Committee awarded their Prize for Essays submitted for competition to Dr. Morland; and he has now reproduced them, combined and somewhat modified, in the volumes now before us, and which will be found a valuable contribution to medical science; for the modern investigator has the aid of the developments of modern chemistry, and more particularly, modern *Microscopy* which enable him to carry his researches far beyond the domain explored by the ancients.

But with all his acumen and research, the author has almost commenced his work with a statement, which it seems to us, requires either some modification, or explanation. He says:—

"The urinary organs are the kidneys, *which are true glands; the ureters, which are the first conduits for the transmission as secreted;* etc. On the contrary, Prof. Peaslee in his Human Histology says:—

"*Urine is merely an excretion*, *i. e.* it consists essentially either of effete elements resulting from the disassimilation of the tissues, or of others in the blood in excess—the removal of which is essential to the health of the organization."

Carpenter says :—"One of the most remarkable circumstances attending this excretion, in the Mammalia particularly, is the large but variable quantity of *water*, which is thus got rid of,—the amount of which bears no constant proportion to that of the solid matter dissolved in it. The kidneys, in fact, seem a kind of regulating valve, by which the quantity of water in the system is kept to its proper amount. * * * The *cells* lining the tubuli uriniferi are probably here as elsewhere, the instruments by which the *solid* matter is eliminated, whilst it can scarcely be doubted, that the office of the Corpora Malpeghiana is to *allow the transudation of the superfluous fluid through the thin-walled and naked capillaries of which they are composed.*"

In regard to the function of the kidneys, Dr. Morland does not differ much from the opinions of the authors quoted, for he says :

"The kidneys being depurators of the blood (*not* manufacturing organs, like the lachrymal, the salivary, mammary, and other glands,) "and *removing* therefrom the unassimilated, superfluous, and effete albuminous principles, as well as the mineral matters incidental to those principles or derived from other sources, are obviously of the highest importance in the system."

Aside from what we think these and a few other minor errors of physiology and treatment, this work must prove of great value and interest to the profession.

The Homœopathist's Visiting List. Book of Engagements and Pocket Repository for 1859. By Henry Minton, M. D. Brooklyn N. Y., J. P. T. Smith.

The Physician's Hand-Book of Practice, for 1859. By William Elmer, M. D. New York : W. A. Townsend & Co.

The Physican's Visiting List, Diary and Book of Engagements, for 1859. Philadelphia : Lindsay & Blackiston.

Pocket-books of this character have become a necessity among physicians, and few who have once used them will consent to pass the year without providing themselves with one.

The Homœopathist's Visiting List contains a summary of diseases arranged in alphabetical order, with the kinds of Medicines that are recommended by the best Homœopathic authorities, which abstract may be thought of use to the tryo in medicine, but can be of no advantage to an informed practitioner. Such condensations are worse than useless. They convey no idea, thought, or suggestion, to the mind of the reader other than that a *large* amount of matter is brought into a *very small* space,—so small indeed, that it is passed unobserved by nine-tenths of those who may use the book. The remainder of the book is just what the physician needs, and consists of blank leaves for a daily memorandum, obstetrical record, vaccination engagements, etc., etc., and as such we recommend it.

The Physician's Hand Book of Practice was published last year for the first time, and its ready sale induced the author to issue it again. It contains the same material that was in the last edition, (a notice of which may be found in the COLLEGE JOURNAL of last year) and is liable to the same objections that may be urged against the *Homœopathist's Visiting List* noticed above.

The list of remedial agents which occupies some thirty pages, is of no value, as the articles are arranged in an alphabetical order. Had they been classified according to their action upon the system, the reader could observe at a glance the medicines best calculated to produce the required effect, and make his selections accordingly.

But this book is objectionable in other regards. The memoranda of practice is rendered useless by the ruling, which compels the physician to write the name of his patient in one part of the book opposite a given number, and register the *number* in the memoranda. An excessive degree of revision has very materially impaired its value.

The Physician's Visting List, of Lindsay and Blakiston is simply what its name imparts, a diary and book of engagements; and as it has been published a number of years and is well known to the profession, needing no commendation.

Uræmic Convulsions of Pregnancy, Parturition, and Childbed. By Dr. CARL R. BRAUN, Prof. of Midwifery, Vienna. Translated from the German, with notes, by J. MATTHEWS DUNCAN, F. R. C. P. E., Lecturer on Midwifery, etc., etc. New York: S. S. & WM. WOOD, 1858.

THE above title is that of a small though valuable book; consisting of a single Chapter from the large work on midwifery in German by Dr. Braun. From the large work this little gem has been abstracted, and is now presented to the profession in English, to do its part in filling the void now existing in that department of medical literature which relates to chemical pathology.

It is always a source of gratification to receive accessions of this character to our libraries. The development of facts tending to elucidate the origin and progress of specific diseases, must tend to the final establishment of more certain modes of treatment.

A Comprehensive System of Grammatical and Rhetorical Punctuation. Designed for the use of Schools. By CONSUL W. BUTTERFIELD, Cincinnati: Longley Brothers, 1858.

THE title sufficiently indicates the design of this little volume, and it seems well calculated to accomplish its purpose. Timothy Dexter of Boston, wrote a book without any punctuation in the text, being unacquainted with the rules of the art; yet he admitted the importance of points and characters indicating the ideas of the writer, and gave some pages entirely devoted to the characters used in punctuation, *that the reader might make his own selections.*

As most writers prefer to use points, we advise them to buy this little book, and thus be sure they are using them in accordance with correct usage and rule.

Practical Dissections. By RICHARD M. HODGES, M. D., Demonstrator of Anatomy in the Medical Department of Harvard University, Cambridge: John Bartlett, 1858.

THIS is essentially a dissector's guide, and only intended for use in the dissecting room; and as such it is superior to any in use. The descriptions are clear and concise, and the order observed is such as is naturally presented to the operator upon the cadaver.

We cordially welcome it to our library as a valuable acquisition to the literature of anatomy.

Lectures on the Diseases of Women. By Charles West, M. D., etc. Complete in one volume. Philadelphia, Blanchard and Lea, 1858.

In the COLLEGE JOURNAL for Nov. 1857, we noticed Part I. of the work of Dr. West which comprised his Lectures on Diseases of the Uterus, embracing the first *twenty* of the series.

In the present volume which is styled complete, but which in reality is but a half of the whole book, and has a title-page to fit the entire work, the author considers inflammation of all the organs of the pelvic region,—ovarian tumors, and ovarian dropsy, diseases of the female bladder, urethra, vagina, and the external organs of generation; thus confining himself to diseases of the female organs, in and near the pelvis.

As a monograph, it is very excellent; but those who might purchase it supposing it to treat of other diseases peculiar to females, would be disappointed.

American and European Druggists' Directory, 1858–'59. Published annually. New York, Michels and Elder.

THIS is a valuable book for the trade, and appears to be as accurate as it could well be in the first issue. We observe the names of many country doctors, who keep a stock of medicines for their own use, in this list of Druggists.

The History of Prostitution; its Extent, Causes, and Effects throughout the World. By Wm. W. Sanger, M. D. Resident Physician, Blackwell's Island, New York City. New York, Harper and Brothers, 1858.

It is a lamentable fact, that there are at the present day, quite too many ambitious writers who prostitute their talents to the demands of a depraved, prurient, public sentiment. Nor are publishers wanting, even those who make great pretentions to be advocates of an exalted state of morality, who from the expectation of great gain, are ready to lend their presses and capital in the publication of matter that can serve no good purpose. The enterprise is not unlike the issuing of those scurrilous sheets—the "Life in Town" papers—which occasionally shoot forth in our large cities under the specious pretense of checking vice, but are really gotten up to pander to the common disposition to scandal.

If the *History of Prostitution* contained well digested statistical tables from reports made in the large cities of this and other countries, it would prove of inestimable value to the medical profession, and to the guardians of the public health, wealth, and morals; but it is an entirely different affair. It is intended for the general reader, and sent forth evidently with the intention of exciting a morbid curiosity to read what might be written upon a subject like the one selected,—a curiosity always on the alert for anything touching the sensual passions.

It is barely possible that a few ladies of fashion who chance to read the book, ashamed to have imitated so closely those whom they affect to despise, may derive from it a moiety of good, especially if they be led to reflect upon the utter worthlessness of such a flashy and transitory existence and notoriety.

The author has dredged from antiquity all the filth her history contains, without referring by force of contrast, to the many bright examples of continence and chastity that have exalted the memory of almost every age. He has distastefully re-arrayed such meretricious characters as inebriated poets, panderers to royal patronage, have from time to time sung into infamous notoriety; delineating as a general thing, only such courtezans as have by charms or fortune occupied influential positions in court society. Favored characters of that class stand in striking contrast to the common herd of prostitutes who are miserably dragging out an existence of an average of *four years* duration.

It is a matter of no little surprise that papers professing strict religious sentiments will speak of this book as though the information it contained was valuable, and as though a very general knowledge of this great social vice tended to suppress it.

A few chapters near the close of the work, on the state of prostitution in New York City, if disconnected from the trash which precedes them may be recommended for professional perusal.

"Massie's Southern Eclectic Practice of Medicine."

We have received a lengthy communication chiding us for permitting a book with the above title to be palmed upon the profession as an Eclectic work. Among the reasons that we might present for our seeming negligence, let the following suffice:

1. The book is not in our possession; we have not felt, and do not now feel justified in expending our money for a useless article; and although we examined the production some years ago sufficiently to comprehend its scope and character, we do not think proper to review a book we have not read, and which is not before us.

2. We have never for a moment suspected that any person possessing intelligence enough to make his opinions of any value, could fail to see that the book in question is in fact an Old School production, seeking favor under an assumed title.

3. We have seen no reason to suspect that the book is likely to find its way to the offices or residences of our readers, unless their curiosity is excited by something in the form of a criticism, and we were not disposed to aid in its sale even in that way.

We must however acknowledge, that one point made by our correspondent has so much force that we connot remain longer entirely silent, viz: That the book referred to has recently been brought into notice and commended by the Eclectic Medical Journal, and its author indorsed by an appointment to the chair of "Theory and practice in the Eclectic Medical Institute." To those who are not aware of the exceedingly emaciated condition of the Journal and Institute, and of the very small extent to which a commendation or indorsement from that quarter is capable of influencing the public mind, such concern as that manifested by our correspondent is certainly natural; and as he is not the only person who has recently expressed a fear that our cause might be scandalized by the book in question, we have determined to devote a small space to it.

We should be pleased to avail ourselves of our correspondent's entire article, were it not so long. We cannot spare much space for such a subject. We will therefore sum up his criticisms on the literary character of the book, and then in his own language slightly abridged, set forth some of its practical teachings.

Our correspondent first demonstrates the authors *egotism* by several quotations, in which self-complacency, arrogant pretention, and false assumption, are finely exhibited. He then exposes two or three dozen violations of grammar, as samples of the countless blunders with which the book abounds; and which he shows to be so often repeated and so characteristic of the composition, as to preclude all possibility of referring them to mere slips of the pen or errors of the printer, and to compel the reader to regard them as evidence of ignorance and illiteracy in the author. After thus annihilating every claim of Doctor Massie to the possession of even moderate attainments in English Literature, he says:

"But upon this point, I have been unmercifully tedious; though to do my author anything like *justice*, I could not be otherwise! The sentences and parts of sentences noted and commented upon, were taken at random, and without reading anything like the whole of the work. And I do now honestly declare, that I never read as much in any book before, where I found so many inaccuracies, so many glaring violations of grammar as I find in this book! And I, as an eclectic, enter my solemn protest against considering it an eclectic work, either as regards its literature or its science. And the eclectic brotherhood should, *en masse*, emphatically declare against this empirical work—should *disown* it entirely publicly and privately, at home and abroad, now and forever.

I now come to the most important part of this work, *the treatment* of disease. Now, if it be proven here that *he* is *allopathic*, that *he* recommends *allopathic* remedies, then does his claim to eclecticism go by the board. And, in order that it may not be said that this book only *occasionally* and *casually* recommends allopathic remedies, I will give case upon case, showing to the contrary.

P. 88: In the treatment of intermittent fever he says he gave, "Two grains of *blue mass*." And on p. 89: "*Arsenic* as I before observed, is valuable in this fever." And again, "*Sulphate zinc* is a good article in the treatment of this disease. And still again, on p. 94, "*Tartar Emetic* is given in this disease."

Now, are not all these agents allopathic? Let me see. Here are:—

1. *Blue Mass*,
2. *Arsenic*,
3. *Sulphate Zinc*,
4. *Tartar Emetic.*

None of these agents are used internally by Eclectics. Eclecticism at once and forever excludes one and all of them. How, then, can *he* be an eclectic? and how can *his book* be approbated by eclectics? Yet it is in consequence of the authorship of this book, that he claims our sympathies; and I presume that he was translated from the plains of Texas, to the city of Cincinnati, because he is its author; and because of its ponderous truths, *eclectic remedies, and fine literature*, he has been dubbed, "Prof. of Theory and Practice, in the E. M. Institute, Cincinnati, Ohio."

Allopathic authors of recent date, who are of any consequence in the republic of letters and medicine, do not dabble in these old prescribed agencies, which are now foisted in this wonderful book on eclecticism!

P. 103: In remittent fever I find *blood-letting* advised. "*Bleeding* is but seldom necessary *in the milder cases of remittents;* it might become necessary when the pulse is full, etc., etc." Now, he admits it *may be necessary*, even in mild cases of remittent fever, *to bleed!* What more do allopaths? Precisely the same. But when the pulse is full, etc., then *venesection is necessary!* This is allopathy *out-allopathied!* The *practice* of the majority of the profession, in remittent fever, and, indeed, in almost all diseases, is now against venesection: But this modern "Eclectic," however, this "Prof. of Theory and Practice in the E. M. Institute, Cin. O.," must reform backwards! and advise the *abstraction of "the life of the flesh!!"*

P. 104. "Tartarized antimony," is advised in remittent fever. Oh! what eclecticism! And, on p. 105: "*Antimonials* sometimes change the *diathesis* of this disease!" P. 105: "*Mercury* will sometimes change its type, but we must confess that we are a poor advocate for its use; we think, in a large majority of cases, that podophyllin fulfills all its indications." So are *allopaths* "poor advocates for its use," and prescribe it but seldom. What more is *he* than an allopath? He is indeed to be praised none for seldom prescribing it, but blamed a great deal for prescribing it at all, as he professes to be an eclectic, and to have used, so as to understand their powers, *eclectic hepatics.* But no genuine eclectic ever used *podophyllin*, *leptandrin*, *sanguinarin*, *euonymin*, *phytolaccin*, etc., long enough to understand their remedial powers and safety, and then returned to the use of mercury.

P. 107: "Blue mass" is again recommended! On p. 109: "Blue pill" is advised! P. 110: "Blood-letting," "*calomel* and *tartarized antimony*" were had recourse to! And he an eclectic?

What are the remedies of this Southern Ajax, in this disease? They are:—

1. *Mercury*,
2. *Blue Mass*,
3. *Blood-letting*,
4. *Calomel*,
5. *Tartar Emetic*,

What an array of *eclectic* remedies! What must we think of the person's eclecticism who uses them? of the book that recommends them? of the school in which the *author* has been elected Prof. of Theory and Practice? *O, tempora! O, mores!!*

P. 116 and 117: "In the beginning of this fever"—continued fever—"and in the absence of the above symptoms, *a grain of tartar emetic* with a scruple of ipecacuanha is sometimes beneficial; if the pulse however, would justify the use of the lancet, *I should always premise bleeding* before giving it. It is in this fever the lancet, if ever used, *will be beneficial.*" Here are *tartar emetic* and *blood-letting* recommended again. What more do allopaths?

P. 117: "*My own* impression is, that in this disease, above all others, *calomel* in combination with podophyllin as an alterative, is the *most proper.*" He advises calomel, in from five to thirty grains per dose. Now, is this "Eclecticism?" Is it not rather bold faced *allopathy?* O, what a pure eclectic, and what *a pure eclectic College* is that over which this *calomel*, *tartar emetic*, *blood-letting* professor presides! The principal remedies prescribed in continued fever, are:—

1. *Tartar Emetic*,
2. *Venesection*,
3. *Calomel, in* 30 *grain doses.*

Now, if *this* is eclecticism, the Lord deliver me from its embraces. If I must use allopathic remedies, let me fall into its ranks and fraternize with all the mighty men of *literature* and *science* of that time-honored segment of the profession; and not follow in the wake of such illiterate and unscientific pigmies as the author of "Eclectic Southern Practice."

P. 133: In congestive fever, he recommends as the *first thing* "*blood-letting!*" Let him give *his* reasons and *the condition* for its use. "We most generally find our patient with *a feeble*, *quick pulse*, *cold skin*, and other marks of *prostration*, and in *such a case we* should probably resort to the lancet!" Now can allopathy beat that? *Because* a man has but "*little pulse*, *cold skin*, and other marks of *prostration*, he must be *bled*, so as to give him *warmth* and make him *strong! Credat qui vult!*

P. 134: "I would however remark, that I have succeeded with *the calomel treatment in large doses.*" Here it is again—"*calomel!*" This, with my eclectic author, seems to be the *alpha* and *omega* of his treatment! And he claims to fraternize with eclectics!!

P. 136: "Some Southern practitioners recommend large doses of calomel, from one hundred to three hundred grains, and repeat often; and make positive assurance when thus administered, that they have done more good than with all other remedies besides. I, MYSELF, RESORTED TO THIS TREATMENT IN THE CASE OF A DISTINGUISHED GENTLEMAN OF GRIMES COUNTY." Here then, we have this Southern Ajax, this mighty "Eclectic," who, because of his distinguished skill in practice, was translated from Texas to Cincinnati, declaring that HE HAS GIVEN THREE HUNDRED GRAINS OF CALOMEL AT A DOSE!!

P. 141: "In this disease blue mass is recommended." And on p. 142, we are told to "administer calomel" and "to draw blood!" P. 143: "*Calomel* often repeated in small doses," is recommended! But, to do my author justice, I will give *his* treatment in this fever as recorded p. 144. "I immediately gave him 200 grains of calomel, which not having operated in six hours, was repeated with the addition of an hundred grains; this dose was repeated afterwards and during the time *I literally covered him with sinapisms*, and had him *constantly rubbed with hot brandy and pepper*."

Now here was a poor soul *eclectically* treated with *eight hundred grains of calomel*, was *literally covered all over with sinapisms*, and *constantly rubbed all over* (how could this be done, when he was before literally covered with sinapisms?) with *hot brandy* and *pepper*, and still the poor soul obstinately refused to die!! Eclectics of Cincinnati, of America, what think ye of that for eclecticism?

P. 162: In yellow fever, "*calomel*" is the thing to arouse biliary secretions." P. 197: In rheumatism "calomel" is recommended. P. 207: In erysipelas the "*lancet*" and "*mercurials*" are recommended. P. 236: In hepatitis "*calomel*" and "blue mass" form the vanguard of his treatment. *Mercury* in some form, is the "*maynum dei donum*" with this great Southern practitioner, who is an "eclectic in its broadest sense," and who enjoys an "enviable reputation, both as physician and medical correspondent," according to the Eclectic Medical Journal.

Now, eclectics of Cin., of America, dos'nt this "knock off your socks?" Is it because he gave 300 grains of calomel at a dose, and 800 to one man, and in a short time, rolling him in *sinapisms*, and immersing him in *hot brandy* and *pepper*, that he is known as an "eclectic in its broadest sense;" and is it because he butchers the King's English, knocks philosophy into a "cocked hat," and murders the science of medicine, that he enjoys "an enviable reputation,"—as medical correspondent.

This great "medical correspondent" so jumbles up nouns and pronouns, so uses singular and plural verbs, and *vice versa*, so jumbles up his commas, semi-colons, colons, periods, exclamations, dashes, parentheses, etc., etc., that in *his* hands, English Literature becomes a mere balderdash.

But I cannot pursue this subject further, for I am now sick of the work. And I must say that upon the whole, I never saw a greater attempt at imposition upon the literary and scientific world. And, as regards his whereabouts in medicine, *his book* convicts him as an allopath attempting to wear eclectic livery.

But it is said in his justification, that *his book* was written some 6 or 8 years ago. Be it so. Has *he* ever *renounced* it? Has the *College* over which he presides as professor, *proscribed* it? Has it, or at least *one* of its professors, not done *all* that it could do to throw *this book* broad-cast upon eclectics everywhere?

Let him come out and write a thesis on literature, redeeming his scholarship; let him come out in denunciation of *his* allopathic book, and write one purely eclectic; let him, in this work, show that he is a scientific man; and I will meet him on fraternal professional grounds, and cordially give him my ☞. Without some such course, upon his part, *I* can never recognize him as a sound eclectic, can never receive his book as authority, nor have confidence in the school that retains him as a professor, As to the man personally, I know nothing; but presume that, literature and science aside, he is a perfect gentleman. I have therefore, written for no private ends, but *pro bono publico.*

Illinoisan."

A Manual of Psychological Medicine; containing the History, Nosology, Description, Statistics, Diagnosis, Pathology, and Treatment of Insanity. With an Appendix of Cases. By John Charles Bucknill, M. D., etc., and By Daniel H. Tuke, M. D., etc. Philadelphia: Blanchard and Lea, 1858.

We have not space to speak of it as it merits, and as the very great importance of its subject deserves. There is no department of the humanitary science of more interest than derangements of the mind, nor one as little understood by the public, by law makers, and those who have the enforcement of the laws entrusted to their care: and even the great majority of the profession are less informed on this than on most subjects pertaining to their calling.

Heretofore, the books devoted especially to derangements of the mind and the treatment of such diseases, were few and unsatisfactory; and the only periodical published in this country advocating especially the interests of the insane, is far more instructive to those having charge of the Asylums, than to the general practitioner; hence the profession have been forced to remain in partial ignorance, or to expend more time and effort in acquiring information than could be well spared from more immediate and pressing duties.

But the present work does very much to supply the great need; and we urgently recommend it to the favorable notice of our readers, as the best one yet published in the English language.

MISCELLANY.

ARTIFICIAL SUBSTITUTES FOR LOST LEGS.

Prof. Howe has just received some of the finest specimens of the leg maker's art that were ever contrived. Mr. D. De Forrest Douglass, the inventor and manufacturer, was for several years the best workman of Palmer & Co., of artificial leg notoriety; and having some excellent ideas of his own, he started, young America like, "on his own hook." Not only does the work of Douglass surpass that of Palmer & Co., in natural contour, beauty and finish; but in the skilful adaptation of mechanical principles to answer anatomical and physiological purposes. We happen to be somewhat acquainted with the peculiarities of the various artificial legs in use, and know of none that are so free from objections as the "substitutes" of Douglass. The artificial leg of Palmer has several serious faults; and on account of them the limb is constantly needing repairs. The universal complaint of those wearing Palmer's leg is that the heel cord elongates or breaks; and that the plates of steel entering into the formation of the joints, split out the thin wood to which they are riveted. The leg of Douglass, has not the spasmodic jerk at the knee which is a characteristic of Palmer's patent limb; nor has it the clumpy sound in walking that is the imperfection of most artificial limbs.

THE SPRING SESSION.

Our readers will bear in mind that the Spring Lectures will commence the Ninth of February next. The number of Students in attendance at The Eclectic College of Medicine has been steadily on the increase from the time it was incorporated, and all have expressed themselves more than satisfied with the facilities and instruction afforded them. A fair proportion of the present Class will remain with us during the Spring, and we anticipate many who have written us will be here also. If half the number who have proposed coming, are present, we shall have a very large class. The Course of Lectures extends through sixteen weeks, and is as full and complete as that of the Winter term.

MARRIED.

In Erie, Michigan, Nov. 15th, by Rev. Charles Thomas, Dr. Valade, of Toronto C. W., to Miss M. A., eldest daughter of Francis Cousins, Jr.

In Worcester, Mass., Nov 16th, by Charles Hersey, Esq., (father of the bride) assisted by Rev. Horace James, Charles A. Wheeler, M. D., to Miss N. Christene Hersey, all of that city.

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ORIGINAL CONTRIBUTIONS.

ELECTRICITY IN DENTAL SURGERY.

BY W. W. GARDNER, M. D.

In operative surgery there is no one thing that has given me greater satisfaction, than electricity in the extraction of teeth.

Since August last, about fifty teeth have been extracted by me, and only two persons on whom the experiment was made, have condemned its use; while a majority of the others give it unqualified praise.

When I first began its use, having no guide to follow in my manipulations, its success seemed somewhat doubtful, and a few severe shocks not only shocked my patients but shocked my credulity in its practicability.

Experience and experiments warrant me in urging my professional brethren to give their attention to its merits; and I crave indulgence while I give a history of my efforts, and a few cases in practice.

I am using the common galvanic battery, developing the electricity by solution of sulphate of copper; the conducting wires are tinsel cord insulated by being wound with cotton. The positive electrode is connected by a clasp to the straight lever of the forceps, while the circuit is completed by the patient who holds the negative electrode in the left hand.

The insulation of the forcep-levers is made by oiled silk, leaving an opening on the straight lever to slip on the clasp which is a simple steel spring attached permanently to the conducting wire of the positive pole.

My first trials were made with the electric current increased to the full intensity desired in the operation, which, as before stated, gave such sudden shocks as to be unpleasant; but now after separation of the gingivæ, the forceps are applied for extraction while the *intensity* of the current is decreased to a point hardly susceptible to the patient, and as soon as manipulations commence, an assistant, at the command "push," forces the plunger to the point desired in the case, where it remains until the operation is completed.

The following cases selected for illustration are types of the majority.

Case I. A lad twelve years of age. Teeth: Left upper second molar, and left lower first molar. Manipulation on upper molar at first was tediously prolonged, requiring unusual traction. The contortions of the face and rigid contortions of the arm were severe while operating; and the shock was so great as to confuse the mind for a few moments. He trembled like an aspen, and not until the lad held the poles in each hand could we learn what *his* opinion was of our experiment. In reply to our query, "Did it hurt you?" He put his finger to his mouth and said "I do not know; is it out?"

Fearful that such intense currents would injure him, it was reduced. and the lower molar taken hold of. Owing to accident, the battery failed to work, but the tooth was taken out more easily than the other, but accompanied with loud cries of anguish from the lad which lasted long after the operation.

Case II.—A Lady: tooth, bicuspid. Manipulation easy. Electric current applied slight, and gradually increased. Patient declared it "to be wonderful; not any pain; could hardly believe that the tooth was out."

Case III.—Adult male: tooth, canine. This patient had been suffering with cerebral congestion for twenty-four hours; pulse 100, throbbing, full; severe pains in the head, delirium, eyes red, light and sound painful, face on superior maxilla over the tooth swollen, hot, red, and distressingly painful: anorexia, constipation, chills, hot dry skin.

Prescribed anti-bilious physic, a teaspoonful every third hour until the bowels moved;—gelseminum, dose 30 drops every third hour. Second day. Symptoms not as active, more pain in the face. I applied the electric current, but owing to the palor of the patient, and his first expressions of agony, the operation was stopped; the trial only loosening the tooth in the socket. The patient declared the first shock to have been "inexpressibly painful to his whole body, but the manipulations with the forceps were not painful." In about half an hour, at his request, the second trial was made without pain, and successfully.

This case, with one other, convinced me that it was of doubtful propriety to use electricity when the brain was sympathetically affected, or even in ulceration at the apex of the fang.

Case IV.—A boy six years of age: teeth, two upper incisors. Fangs not ulcerated; no pain excepting that produced by the gum-lancet and application of forceps.

Case V.—Adult, male: tooth, right upper cuspid—manipulations and traction at first trial not painful, but requiring considerable force. Second trial, force greater, no pain. Third trial, very powerful, traction rotary, and undulatory motion also. Tooth extracted without pain.

Case VI.—A Lady: Age 16.—Tooth [right upper molar. The patient declared that the very slightest current of electricity carried through the hands would be very painful. An assistant applied the negative electrode to the facial nerve. The tooth was extracted, but not very easily. The shock prostrated the patient for several moments, but she soon rallied and declared that she never would have another tooth taken out without having the current applied.

Case VII.—A boy: aged 12, tooth, molar. Manipulations as usual; pain trifling. Two weeks after he came for the purpose of having another out—operation successful as the first.

Case VIII.—A Lady: teeth, a first molar, operation partially successful; a bi-cuspid, pain not much modified; 2d, a incisor, no pain.

Remarks:—Undoubtedly improvements have been made in the use of this agent in dental operations.

If the whole forceps could be insulated, it would render the operation pleasanter. Its contact with the lip produces a sharp stinging pain which makes the patient restless.

It may be true also, that it would be preferable to apply the negative pole direct to the region traversed by the facial, inferior dental, or superior maxillary nerves.

F. A. Bryant, M. D., of Cedar Falls, Iowa, suggests to me the application of varnish to the forcep to protect the gum but I have not tested its practicability.

A slight current passed over the face opposite the excavation after extraction, immediately stops pain; and any nervousness excited by the shock is usually relieved by the patent's holding the electrodes in the hands a short time.

Adult males require a more intense current than females, and children not quite as severe as adults. Every case of incisor teeth has proven perfectly successful in my hands. It has been a conjecture on my part that the electric current in some way rendered the extraction less easy but it may be only a conjecture.

I hope others may give their experience and mode of operation for our further improvement.

Note.—In the Third Volume of the College Journal, August number, is an article giving full directions as to the mode of applying Galvanism in tooth extraction. Since that was written, many have tested the matter with results slightly varying, but all favorable. Eds.

PHARMACY IN THE PHYSICIAN'S OFFICE—TINCTURES.

BY PROF. J. F. JUDGE.

The professions of Physician and Pharmaceutist are properly distinct; and in cities where they can be, they should be and are properly pursued by different individuals, to the great advantage and convenience of all concerned. But since, in the country, circumstances are such as to frequently compel the practicing physician to perform the duties of the preparer, as well as prescriber of medicines, it becomes his duty to have a sufficient stock of pharmaceutical knowledge at his command to be able to make in a scientific and elegant manner such preparations as it may be necessary for him to use in his practice. Such knowledge is not universally possessed by physicians, while some of those who are accustomed to the preparation of medicines in the office, may perhaps not be acquainted with the more recent improvements in pharmaceutical manipulations. A few brief hints upon the subject, setting forth such plans of operating as may be conveniently prosecuted in the physician's office, without expensive or cumbersome apparatus may not be uninteresting, and are all that the writer now proposes to present to the readers of the College Journal.

In pharmacy the term Tinctures is applied to solutions of medicinal substances in alcohol, or dilute alcohol. It is sometimes made to include those prepared with æther, dilute acetic acid, or wines, in which case the solutions are known as ætherial, acetous, and vinous tinctures. Alcohol is preferable to water as a solvent of medicinal principles for several reasons: It is an anti-septic, does not dissolve gum, starch, and similar bodies which endanger the permanency of the preparations, and is, furthermore, a solvent for many medicinal substances which are not soluble in water. Alcohol of absolute strength is never recommended in the Pharmacopœas, but always diluted with a greater or less quantity of water, depending upon the nature of the active principle or parts of the substance to be acted upon. Thus, the strongest alcoholic menstrum directed in the United States Pharmacopœa is that known as *rectified spirits* in those of London, Dublin, and Edinburgh, and contains about fifteen per cent. of water, having the specific gravity of 0.835. Alcohol of this strength is preferable to that containing more water when the medicinal principle is insoluble in water, as is the case with resins, camphor or the essential oils. But when the medicinal principles are soluble both in alcohol and water, or when there are several, a part being soluble in each of these liquids, a more dilute alcohol is preferred; and hence the pharmacopœa directs in many instances a *dilute alcohol* of specific gravity 0.935 containing but forty-two per cent. of alcohol. This strength is scarcely sufficient for permanency, and doubtless might be replaced with profit, in many preparations. by the dilute alcohol of the Edinburgh College, of the spec. grav. 0.912, containing fifty two per cent. of alcohol, or that of the London College, spec. grav. 0.920, containing forty-nine per cent. of alcohol.

Several methods have been adopted for the preparation of tinctures. Maceration was formerly the only plan resorted to for this purpose. It consists in mixing together the solid and liquid ingredients in a glass vessel, and allowing them to stand for two weeks, frequently shaking the vessel during the interval, and finally separating the resultant solution either by filtration or expression through a coarse linen cloth; and subsequent filtration through paper to remove all insoluble matter and render the tincture clear. The chief objections to this process arise from the length of time required, and the fact that the solution formed by the action of the lowest stratum of liquid becomes specifically heavier than the superior and unsaturated portions of the liquid, and therefore retards the contact of the unsaturated portion of the solvent with the matter to be dissolved. To remedy this defect, the pharmacopœa always directs that the bottle shall be frequently shaken; but unfortunately this is frequently neglected, and hence arises a source of inequality in the strength of similar tinctures prepared at different times by this simple process. This process is less liable to fail in the hands of inexperienced persons, if the written directions are followed, than any other; and is therefore always directed to the pharmacopœa even when others are mentioned as a alternatives.

An improved plan of maceration for tinctures was proposed by Dr. Burton, and is essentially the same as that of Allsop's for preparing infusions. Dr. Burton's modification consists in suspending the solid substance to be acted upon in a muslin bag immediately beneath the surface of the menstruum, so that the upper portions may exert their solvent power upon the solid, and becoming saturated move in consequence of their increased specific gravity towards the bottom of the vessel and thus produce a current, which continually presents fresh portions of the solvent to the substance to be acted upon. In this process it is well to raise the bag above the surface as frequently as once a day, so as to permit the fluid within to drain off, and again immerse in the liquid; thus it comes more readily in contact with the unsaturated fluid.

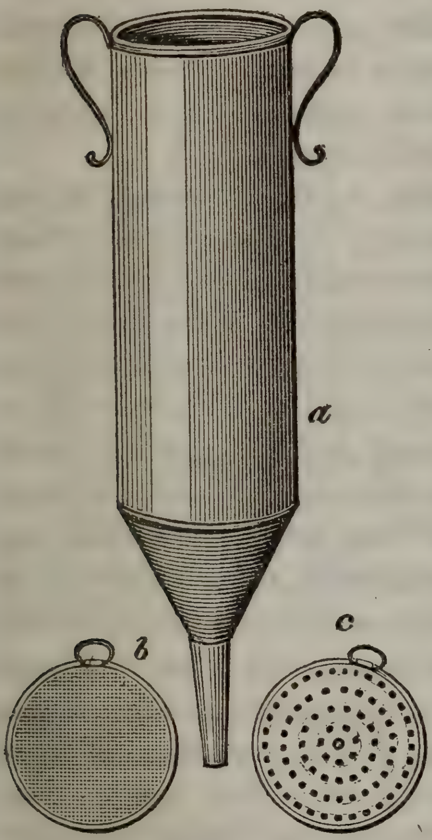
In preparing tinctures by maceration, the solid substances should be dry, and in moderately coarse powder. Their comminution may be accomplished either by contusion in an iron or brass mortar; by grinding in a drug or spice mill; or by slicing with a knife, and subsequently powdering in the mortar. The powder should be sufficiently fine to permit of ready contact between its particles and the menstruum; but should not be so far reduced as to agglutinate, and thus prevent the penetration of the liquid. When the tincture is to be a *compound*, containing several substances which vary much in their solvency, it may be well to present the least soluble first, and after it has been thus submitted for some time, successively add the remaining ingredients in such order as to add the most freely soluble last. This plan will frequently be found advantageous, as by this means the proper proportion of each ingredient is more likely to be dissolved.

The process of *percolation* or displacement, was not applied to the preparation of pharmaceutical solutions until about the year 1833; although it had long been practised for the preparation of the beverage coffee, in the *Cafetiere de doubelloy*, an instrument commonly used in France, and sometimes in this country under the name of the French Coffee pot. The French Coffee-pot is a displacement apparatus or percolator of convenient form, and suggested to M. Boullay and Son, French pharmaciens the application of its principles to the preparation of pharmaceutical solutions, which they succeeded in accomplishing in the year already mentioned. They demonstrated its applicability to the pharmaceutical laboratory as well as some of its best modifications in form, and indicated the chief points to be noticed in conducting the process.

The first person to call the attention of American Pharmaceutists to this process in a prominent manner, was the late A. Duhamel, a Philadelphia Apothecary of much intelligence, in the American Journal of Pharmacy for 1838. The process subsequently attracted the attention of others engaged in pharmacy, and in 1840 this process was favorably mentioned in the United States Pharmacopœa, and in 1850 it was frequently designated as an admissible alternative for the process of maceration. Since then it has become one of the usual methods of preparing tinctures and similar preparations, especially when the time allowed for manipulating is brief. Twenty-four hours is generally the longest period occupied by this process, while maceration requires two or three weeks. Percolation is therefore well adapted to the physicians office whenever it is desirable to rapidly prepare a tincture of standard strength, provided that proper precautions are taken to avoid those accidents which are liable to occur and interfere with the accomplishment of the desired end. These are easily avoided, provided the operator is acquainted with the principles involved in the process of displacement.

The apparatus required is not expensive, and may frequently be made by persons of common ingenuity from a lamp chimney, or any other convenient and cylindrical vessel which may be at hand, provided it be open at both ends. The common tin percolator Fig. 1, *a*, is easily made by any tinner, and consists of a tin cylinder terminating at its lower end in a funnel, the neck of which should be of such size as to readily pass into a large tincture bottle, and yet not be too small to permit its being closed by inserting a cork when desired. The length of the cylinder should be at least twice as great as its diameter. There should be two diaphragms of tin, one with fine perforations *b*, to be placed at the bottom of the cylinder, and immediately at the top of the funnel portion. This is for the support of the powder to be acted upon; while the second diaphragm *c*, should be perforated by large holes, and be placed upon the top of the powder in the percolator, to prevent the disturbance of the solid matter when the liquid is from time to time added.

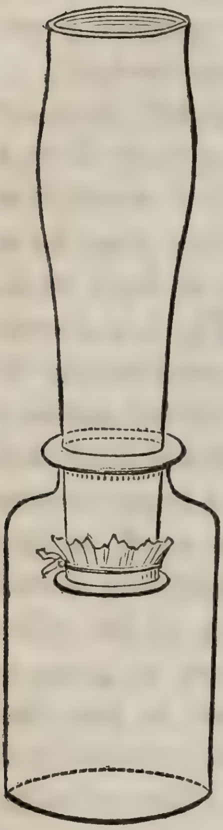
Fig. 1.



When small quantities of the solid body are to be operated upon, a common lamp chimney may be made to serve as the percolator: Fig. 2. This is accomplished by tying over the smaller end, a piece of book-muslin, and placing above it a small piece of sponge or cotton-wool. The percolator thus constructed may be supported either by the mouth of a bottle in which it may fit, a retort stand, or a circular opening of proper size cut in a piece of card, which should be placed upon a common glass jar, to which serves also as a cover, preventing the evaporation of the tincture while being collected. The top of the percolator may be also covered in case very volatile liquids as æther, are used.

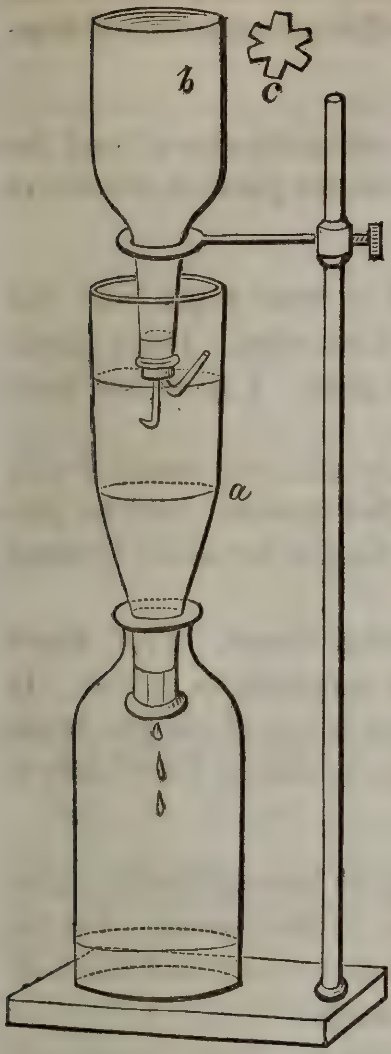
A common hock-wine bottle can easily be made to answer the purpose of a percolator, by cutting off the base within an inch of the bottom with a diamond, or if such an instrument is not at hand, a piece of string which has previously been saturated with fused sulphur may be turned several times around the bottle at the line of the desired fracture, and thus placed, may be ignited. In burning, the sulphur held by the string, the adjacent parts of the bottle become heated and expand, and if thrust suddenly in cold water in this condition, cooling and sudden contraction ensue and produce a severance of the parts. The bottle may now have a cork, previously notched as at *c*, Fig. 3, fitted in the neck, and then being inverted constitutes the percolator *a*, Fig. 3.

Fig. 2.



The root, leaves, or bark, to be exhausted, having been reduced to a moderately fine and equal powder, should be placed in the percolator and sufficiently pressed to produce an equal compactness of the mass; and in case the substance is liable to agglutinate, the powder should be previously mixed in a mortar with an equal quantity of quartz sand, and then carefully placed in the percolator either with a spatula or spoon, so as to avoid the separation of the sand and powder into layers. The mixture in this case, as before, should be pressed moderately; the amount of pressure differs with different substances, and is best learned by experiment. The next step is to add a quantity of the menstruum, in weight about equal to that of the powder, when if the latter has been properly pressed, the liquid will pass down equally on all sides at the rate of an inch in from four to seven minutes; but should the liquid pass down unequally and in channels, it will be necessary to press the particles of the powder more closely together. When the equal weight of liquid, or a sufficient quantity to moisten the mass of powder has been added, the whole should be allowed to stand from ten minutes to two hours to macerate, depending upon the tincture to be made. After the time of maceration has elapsed, a quantity of liquid equal to that at first used, should be added. It will then be observed, that a strong tincture falls in drops from the bottom of the percolator. This takes place in consequence of the pressure of the superadded liquid upon the saturated solution which has been retained in the apparatus by capillary force, and which

Fig. 3.



while so held, has dissolved its quantum of the soluble matter present. The portion of fresh alcohol now occupies the pores of the impacted mass, and in turn dissolves a portion of the soluble matter present. After some time, a third portion of alcohol is added, and the second is forced down. Thus from time to time more liquid is added until the quantity desired has passed through. When, if the proper quantity of solvent has been used, and the percolation has taken place with sufficient slowness, the tincture will be equal to the best prepared by maceration. Sometimes the last portions of tincture which pass are too weak, when it is advisable to collect these in a second vessel and return them to the percolator; so that in their repassing they may become more nearly saturated.

Sometimes instead of adding the alcohol from time to time, a continuous supply is kept up by a suitable arrangement, and this is especially convenient in the physician's office from whence he may be called and not return at the proper time for renewing the supply. This may be accomplished by so arranging a bottle containing the remaining alcohol after filling the percolator, that its mouth while in an inverted position shall be just beneath the surface of the liquid in the percolator. Thus arranged, the fluid will flow from the bottle whenever that in the percolator falls below the mouth of the former, but not at any other time. Such an arrangement prevents the possibility of the suspension of the process from neglect, and is therefore very convenient.

NOTES AND OBSERVATIONS.

BY T. C. MILLER, M. D.

Concentrated Medicines.—I have ceased from the use of all the so-called concentrated medicines in my practice, except podophyllin and leptandrin. Many of these articles would be very valuable, but are manufactured so unscientifically as not to have sufficient uniformity of character or power, so as to be safe or reliable.

Chloride of Lead.—Of late I have been using chloride of lead for the purpose of destroying cancerous growths in the place of chloride of zinc. In most cases it seems to be preferable.

Prussiate of Iron.—Recently I was called to treat a girl who had been afflicted with neuralgia of the face for nine years. Other physicians had treated her until her money was all gone. I gave her prussiate of iron, and the cure appears permanent.

I also gave prussiate of iron to a young lady who was troubled with what I called "nervous headache," and for five months past the pain has not returned. I supposed the pain in the head to be caused by some uterine derangement.

It is also good as an injection against intestinal worms. Prof. Sachs of Germany considers it preferable to all other preparations of iron. In marasmus of infants, the ferro-cyanuret of iron, is one of our best remedies. I give it in conjunction with columbo, hydrastis Canadensis or ptelia trifoliata.

Mammary Abscess.—I have used with more or less satisfaction, ointments of conium, hyociamus, and belladonna, in this disease. The use of belladonna is not new: Rademacher extols an ointment made of:

℞. Alcoholic Ext. of Digitalis, ʒj.
Cerate, ℥j.

Mix and spread on linen, and applied to the mamma. It needs to be repeated several times a day. I consider it superior to any other ointment in these cases.

Croup.—The same ointment of digitalis is very useful to be applied in croup. I have also found it of value in parotitis, and acute rheumatism. I prefer Tilden's alcoholic extract in preparing the ointment.

Salicine in Typhoid Fever.—In several severe cases of typhoid fever, I have used salicine and prussiate of iron, four grains of each once in three hours; and particularly where there is profuse diarrhœa I have been better pleased with it, than with any other treatment.

Phytollacca in Skin Disease.—In a very bad case of herpes which had resisted various other remedies, I used tincture of poke-root, and entirely cured the patient. I have been pleased with its effects in various forms of skin disease.

Asthma.—In a very bad case of spasmodic asthma, I was able to arrest the paroxysms entirely, which usually came on every other day, by means of the following:—

℞. Tinct. Assafœtida, fʒiij.
Tinct. Lobelia,
Ttnct. Gelseminum, āā f ʒ.

Mix and give forty drops at once, and afterwards thirty drops at a dose, three times a day. The disease disappeared entirely, and has not since returned, except from over-exertion or exposure.

Acute Rheumatism.—In a very bad case, I succeeded in completing a cure in five days with the following:—

℞. Nitrate of Soda, pure, ʒiij.
Water, f℥v.
Tinct. Verat. Virid., fʒss.
Syrup simp., f℥ss.

Of this I ordered one table-spoonful to be taken each hour.

Mercurial Salivation.—In a very bad case, after having used chlorate of potassa, iodine, and iodide of potassium without effect, I applied tar, with perfect success. This treatment originated with Krueger, who speaks highly of it.

Cajeput Oil in Infantile Convulsions.—A child two years old had convulsions caused by intestinal worms. The remedies had been administered with much difficulty, and without avail. I then applied cajeput oil around the umbilical region, which caused the convulsions to cease, not to return.

Gleet.—In a case recently, and very difficult of cure, where the discharge was complicated with obstruction to the flow of urine, I gave the following:

℞. Oil of Juniper, fʒss.
Sweet Spts. Nitre,
Tinct. Gelseminum, āā fʒiij.

Mix and give twenty-five drops at a dose, three times a day. A speedy cure followed. In another case I gave:—

℞. Balsam of Fir,
Tinct. Gelseminum, āā fʒij.

Mix and shake well before taking it. The dose was twenty drops, three times daily.

Hysteria.—I have used the following with good results in several cases of uterine hysteria.

℞. Tinct. Cimicifuga,
Tinct. Chamomile,
Tinct. Castor, āā fʒij.

Mix, and give 25 drops four times a day.

Vinous Tincture of Rhubarb.—For the diarrhœa which accompanies typhoid fever, I have found this tincture admirable, and ask others to make a trial of it. It is made as follows:—

℞. Rhubarb, best, powdered, ℥ij.
Orange Peel,
Cardamon Seed, āā ʒij.
Prickly Ash berries, powdered, ℥ss.
Madeira Wine, Oij.

Mix and macerate fourteen days; express and filter, and then add, loaf sugar, ℥iij. The dose is thirty drops, five or six times a day.

Peach Tree Leaf.—I have found a distilled water of green peach-tree leaf, in doses of twenty drops, once in three or four hours, of great value in acute gonorrhœa. It primarily affects the bladder. Where there is ulceration of the urethra in gonorrhœa, I order an injection of from one to two drops of the muriated tincture of iron, to a fluid ounce of water.

DYSENTERY, OR BLOODY FLUX.

BY F. W. ENTRIKIN, M. D.

Dysentery has prevailed to a considerable extent in Ohio the past season, and for some weeks appeared to be epidemic along Blanchard River, especially in and about the town of Gilboa, in Putnam County.

It was very fatal in the hands of several Old School practitioners. The number of deaths, in about nine weeks, was upwards of sixty. Men, women, and children fell victims to its ravages; though the greatest fatality was amongst children under twelve years of age. Old School physicians, many of them, ridiculed the idea of injections, and depended upon mercurials, tonics, astringents, and opiates. I noticed that acetate of lead and opium were favorite prescriptions. I believe they sometimes blistered the left iliac region.

The epidemic inflammation of the colon appeared to be accompanied by an intermittent form of fever, in many cases. While the inflammation was principally confined to the descending colon and rectum. And where the transverse colon was involved, the only difference in the treatment consisted in inserting a gum tube past the sigmoid flexure, and injecting as high up as possible. The stomach sympathized much, and hence we found some difficulty in getting medicines to remain with the patient. In the worst cases, the patient collapsed (so to speak), after three or four paroxysms of fever; the pulse becoming very feeble and frequent, the surface bathed in continual perspiration, often clammy and cold, while the muco-sanguineous discharge continued to increase in frequency, and the muscular strength to fail, until amidst extreme pain, death closed the scene.

The discharges in some cases were very offensive, though not in all. Sometimes there was diarrhœa, as if the small bowels were involved through sympathy. But many of the fatal cases had healthy discharges occasionally, showing that the disease did not extend above the colon. In the midst of the fatality I was called into the infected district. And I may here remark, that I lost no cases, though many were far advanced when I was called. I do not claim any thing new or peculiar in my treatment of dysentery, but fear that sufficient attention is not paid to the treatment of this disease by injections. I will, then, try to give a sketch of the course I have pursued, without failing in a single case. I have treated an unusual number of cases, for this section of country, and it is quite probable that my treatment is better adapted to the disease as it occurs in miasmatic sections, than in the hilly portions of our country; though I am quite sure that the local treatment is important every where. [See COLLEGE JOURNAL for June, 1858, p. 269—Dysentery, by Dr. Parsons.]

When called early, I controlled the fever if present, by giving every three hours, from five to eight drops of tincture of aconite, (strong,) [root?] at the same time either hydrargyrum cum creta, or leptandrin, in moderate doses, once in three hours until four or five potions were taken. A light cathartic of rhubarb, castor oil, or extract of colocynth comp., and, as soon as the fever was subdued, quinia and hydrastin every two hours, in quantity sufficient to get an impression in six or eight hours. If there was no fever, and an irritable stomach, I gave acetate of morphia, sufficient to allay pain and nervous irritability. And where an irritable state of the small intestines was manifest by diarrhœa, I gave fluid extract of geranium, in drachm doses, every three hours, until it was controlled: and so continued to keep up the tonic impression and control the diarrhœa as occasion seemed to require; using, in the early stage of which I now speak, injections of nitrate of silver, of ten to fifteen grains to the fluid ounce of water, preceded by some mild injection to clear the bowels, and followed by luke-warm water, in the course of half an hour, to dilute and remove the nitrate and secretions. Then two drachms of fluid extract of geranium and of tincture of opium thirty drops—of course observing proper care as to the use of the morphia by the mouth at the same time; always giving mucilaginous drinks, and sponging daily in soda water; using at the same time, sinapisms alternately with hop fomentations externally.

The opiate and geranium injections were repeated every six hours, if necessary, but this was seldom the case, as the disease usually yielded almost as readily as intermittent does to quinia.

When the disease had run for some days, and the vital forces of the patient were exhausted, to the quinia and hydrastin was added capsicum, and in many cases brandy; and a liberal diet in all cases, as of fruits of the season, *cooked*, essence of beef, soups, &c. In these cases, the nitrate did not seem to work as well as in the early ones, and in the later or chronic stage of this disease, where ulceration had taken place in the mucous follicles of the bowels. Here I used as an injection, gallic acid, from three to eight grains, with tincture ot opium and starch as before; and in the chronic form, nitrate of silver, as in the early stage; or as perhaps preferable, a few drops of creasote in alcohol, and diluted with starch water. If mucous discharges are excessive, gallic acid will work like a charm here also. This course, modified by the judgment of the physician to suit the constitution, and to adapt it to childhood and infancy, will I am persuaded, scarcely ever fail to control this fatal malady. I deem the early use of a liberal diet, and support to the vital forces important; and the early use of nitrate of silver injections, the most important step in the treatment of flux. At the same time I hold that quinia should be freely given, to remove that spinal irritability upon which the intestinal congestion and consequent inflammation depends; believing that it is demanded for that purpose whether the case manifests any periodicity or not. At the same time, we should bear in mind that quinia in large doses is a powerful sedative, and hence to be used with caution, or in small doses,—say a half to two grains, and in connection with capsicum, when the stage of collapse approaches.

In this stage the free use of brandy should not be forgotten, as it is often the only hope.

ACETATE OF LEAD.

BY PROF. C. H. CLEAVELAND.

THERE are at least *five* different compounds or combinations of acetic acid and the oxide of lead known to the chemists; the hexacetate, triacetate, diacetate, the sesqui-acetate and the neutral acetate. Only two of these, the neutral and diacetate have been used in medicine. The one commonly used is the neutral acetate, known also under the name of *sugar of lead.*

The Edinburgh Pharmacopœia gives a method for preparing this salt. It is usually prepared by placing thin sheets of lead in shallow vessels containing distilled vinegar, or acetic acid, or pyroligenous acid. And the plates are changed in position often, to change the lead,—first into a protoxide, and then by solution in the acid to a solution of the protoxide of lead until the acid is saturated, which forms the neutral salt, which by evaporation is led to crystallize, when the supernatent liquid is decanted, and by another evaporation yields more crystals.

Acetate of lead combines the astringency of vinegar or acetic acid, with the sedative power of the lead, and hence has often been used where these two properties, or either of them, are required. It is a powerful astringent, and its potency in that regard has led many to make use of it, overlooking the hurtful and dangerous properties of the metal with which the acid is combined.

Although the acetate of lead is frequently used externally for its sedative influence, internally it has been more frequently administered with the view of its acting as an astringent, while its sedative properties have been less called for. In hemorrhages from the lungs, the uterus, and the bowels, its power in restoring the flow of blood is very marked; it has frequently been administered and been highly lauded. It has also been used in diarrhœa, dysentery, cholera morbus, and cholera infantum, and in colliquative diarrhœas and sweats.

In mercurial salivation, stomatitis, and stomatitis materni, as well as in inflammations and ulcerations of the stomach and bowels, it has been much used both internally and as a gargle and mouth wash. It is often combined with opium or morphia in these cases, as well as to form collyria in ophthalmia, and enemata in diseases of the bowels or the vagina, or uterus. The *dose* when given internally is from one to two grains. As a local application in the form of a collyrium, throat wash, wash for burns or other hurts, or as injections, the amount used in the solution at one time is very much more than is taken at a dose internally.

A very strong objection to the use of this, or any other preparation of lead as a medicine, whether administered internally or applied locally, is, that it is apt to produce a peculiar affection of the alimentary canal known as *colica pictonum*, or *lead colic*, as well as an affection of the muscles in other parts of the system, especially of the extensor muscles of the upper extremities, which is characterized by a wasting away of the muscular tissue, together with a loss of power. This is often known as *lead palsy*.

That it has *not* always maintained its high reputation even in those cases where it appears most applicable, may be inferred from the remarks of many authors and teachers. Prof. Meigs has said: "Sugar of lead is thought to be a powerful article in the treatment of these hemorrhages. I do not like it, nor do I much believe in it." It is said that Prof. Hosack was opposed to its use internally. Others very eminent in the profession, and whose opinions and practice are deserving our serious consideration, have refused to administer it internally, and for the best of reasons.

There is much danger attending even the most careful use of it.

Dr. Johnson of New Jersey says: "Four times have the most painful solicitude been awakened by the production of saturnine disease from the internal use of this article: twice in the form of colica pictonum, and twice in that of paralysis." Dr. Becking speaks of a young person who was laboring under consumption, and to whom he gave the acetate of lead, which produced a bluish state of the skin, puffed face, a convulsive cough, difficulty of respiration, with partial paralysis of the feet. This state continued two weeks, when there was a violent access of fever, heaviness of the head, paralysis of the eyelids, and convulsions in the face and extremities, with insensibility, stupor, or delirium, for three days, when the patient died.

Dr. Charliss of New Jersey, states that his wife while on a visit in the southern part of the state, was attacked with uterine hemorrhage, for which she took the acetate of lead in solution. At the end of six days she had severe neuralgia in her toes, which extended to her feet, then to her ankles, and in a few days affected the whole of both limbs. Then followed constipation, and in course, "the most severe colic, such as I pray no human being may ever again endure." After the lapse of two months and a half, the patient had recovered from the effects of the lead.

The terrible effects which have in very many instances followed the internal use of acetate of lead, have induced many, perhaps most of the profession, to decline administering it internally to their patients, while many continue to order its *external* application, as in their opinion not liable to produce harmful results.

But numerous cases are on record of injurious results following its external use, a few of which I had occasion to refer to in the College Journal for August, 1857. Other and more recent cases may be added.

Dr. W. A. Thompson of this city was called some months since, to treat a lady for paralysis of the arm, complicated with severe pain. He learned that sometime previously, she had fallen and sprained or otherwise injured the arm from the elbow upward, and a physician, well known in the community, ordered the arm to be dressed with a lotion of sugar of lead. This was applied by rubbing, and by applying cloths wetted with the solution, with the intention of reducing the inflammation and swelling following the accident. In all, three ounces of the lead were used under the direction of the attending physician.

At the time Dr. Thompson took charge of the patient, there was very nearly entire paralysis of the arm, which was also very painful. By the use of sulphuric acid internally, and electricity to the arm, with occasional external anodynes to allow of sleep, she has become almost perfectly well.

Prof. Graham saw a case of fracture of the lower part of the tibia and abrasion of the skin. Dressings of sugar of lead in solution were applied. The patient died with symptoms of lead poisoning in the bowels.

Dr. Mussey speaks of a case of a man who had used a hair-dye in which there was sugar of lead, some eight years. He had the "blue line" on his gums, and other indications of the absorption of the metal.

These and other similar accidents have led me to think it never advisable, at least under ordinary circumstances, to make use of this salt, either as an internal or external remedy. A solution of the acetate, as well as the *nitrate* of lead may be used as an antiputrefactive, as well as a disinfectant; but as a *medicine*, the danger which accompanies its use far outweighs any special therapeutical value which it possesses.

A CASE OF PARALYSIS.

BY J. A. HENNING, M. D.

October the 20th, 1858, I was hastily summoned to see Miss. H. P., aged fifty-one years; a tolerably fair specimen of the sanguine-encephalo-bilious temperament; of moderate size, has borne twelve children, and usually had good health up to the present illnsss. Six hours previous to my arrival, she was as usual attending to her domestic affairs; when suddenly she fell on the floor, attacked with hemiplegia of the right side.

I was informed by the husband that during the last four or five days she had complained of giddiness, drowsiness, dimness of vision, numbness, and failure of the mental powers; and that once or twice he had noticed transient delirium. At present the most prominent symptoms were loss of sensibility, and of the power of voluntary motion in every part of the affected side. She could not articulate audibly; the pulse was full and slow, beating fifty-eight per minute; bowels costive; pupils of the eyes dilated; tongue small in volume, and *trembling*, otherwise healthy in appearance; extremities cold; delirious since attacked; contortions of the muscles on the right side of the face; constantly trying to change position, and picking at the bed clothes; countenance expressive of anxiety and pain. The prognosis at present was unfavorable, but after mature deliberation, I determined to adopt a stimulating and tonic treatment, and notice the result closely. I ordered:—

℞. Sulphuric Ether, fʒss.
Tinct. of Camphor, fʒiv.
Tinct. Lobelia, fʒvj. M.

Give forty drops every hour and a half. As the bowels are usually very torpid in this malady, I ordered one drop of oil of croton with one scruple of the comp. powd. of jalap every four hours until the bowels moved freely. The following liniment was ordered to be used:

℞. Tinct. of Capsicum,
Tinct. of Lobelia, āā f℥j.
Spt. of Turpentine, f℥ss.
Oil of Origanum, fʒij. M.

Apply along the spinal column and extremities every two or three hours. The extremities to be often bathed in warm water, and sinapisms to be applied to them.

21. The bowels moved twice during the night; the pulse was sixty-nine in a minute. She rested pretty well during the night; general symptoms improving; countenance expressing more quietness. I continued the comp. ether mixture, thirty drops for a dose, every two hours. In view of the temperament of the patient, and the character of the disease, I ordered the following pill:—

℞. Sulphate of Quinia,
Macrotrin, āā ℈ij.
Ext. of Aconite, grs. x.
Hodro-Alcoholic Ext. of Scullcap, ʒss.

M. ft. Pil. No. XL. Take one pill every four hours. Continue the external treatment as before.

22. Improving slowly in every respect. Pulse seventy-two in a minute; converses to day pretty well for the first time; can move the end of the fingers and toes a little, but feels no sensibility in any part of the affected side, except a prickly sensation as if that part of the body were asleep; has no taste of any of the medicines administered. Continued the treatment. For the bowels gave the castor oil and comp. powd. jalap when required. The kidneys to day are rather torpid. I ordered a fluid drachm of sweet spirits of nitre in two fluid ounces of an infusion of eupatorium purpureum every six hours, until the urine flowed more freely.

23. Continues to improve slowly; bowels and kidneys sufficiently active; more rational; pulse same as yesterday; can move the right leg and arm considerably to day. Continue the ether mixture every four hours, and the comp. pill of quinia as before. Beef tea to be used ad libitum.

24. Improving rapidly. It is uninteresting to follow the particulars of this case any farther; suffice it to say that this treatment was continued, though modified to suit the indications, until Oct. 30, when the case was discharged. She had nearly regained the use and sensibility of the affected side, and could take some out-door exercise, which was ordered. Her general health was improving rapidly.

November the 25th. I saw her again, when she stated that she had nearly regained her usual health, and was then attending to her household duties as usual. The treatment of this case was a tonic and stimulating one; quite opposite to that of a certain class of practitioners. Such treatment may not succeed in all cases of this disease, but depletion I do not believe will answer in any case, although it is recommended by the authorities.

Listen to what Prof. Wood says on the treatment, in this disease. "It may not be amiss to state, in general terms, that the remedies in cases of active congestion, active hemorrhage, or inflammation, are bleeding general and local, proportioned to the energies of the system; purging; refrigerants; low diet; rest; and if these fail, *blisters and a mercurial impression*." This affection is one of debility, and the treatment indicated is to strengthen and stimulate the system; but Prof. Wood's treatment induces debility, when it already exists. Such "impression" then is certainly not indicated, but evidently contra-indicated in these cases.

This form of disease consists in a loss of sensation and of the power of motion when it is complete. But in *anæsthesia* there is loss of sensation, without the power of motion being affected. In *acinesia*, the power of motion is lost, while sensation is retained. In *hemiplegia* one half of the body is affected, which is further divided into three distinct varieties, viz:—cerebral, spinal, and ganglionic. Cerebral paralysis may exist alone. Spinal paralysis generally implies cerebral paralysis. But ganglionic paralysis may exist with or without spinal paralysis, and I believe always without cerebral. In making a distinction of these several forms, Dr. Marshall Hall, says: "If, in the attack of hemiplegia, there be spasm or convulsion as a symptom, however evanescent, an event by no means rare, the case is *pro tanto*, not cerebral but spinal paralysis. If in hemiplegia there is a shock to the paralyzed limb, without recovery, an event also not extremely rare, the case is again spinal paralysis. If there be in hemiplegia persistent *a*symmetric spasm, I think the case will prove to be true cerebral paralysis; this spasm being a physiological action of the spinal centre on *all* the muscles, the contraction of the flexors overcoming that of the extensors. But if there be *a*symmetric spasm, as if *pathological*, and the effect of some source of partial irritation of the spinal centre, and its effect on such muscles only as receive their nerves from that special point, it is *spinal* spasmo-paralysis. If there be only atrophy of the muscles, the case is again cerebral paralysis; but if there be what I have ventured to designate *heterotrophy* it is ganglionic paralysis." Here then, in these forms of disease, is a large field almost unexplored; and when we do not understand the pathology of a disease, the treatment will undoubtedly be more or less empirical. Will these remarks direct the attention of the medical profession to its investigation?

SPERMATORRHŒA.

BY A. B. JACKSON, M. D.

By spermatorrhœa is generally understood an unnatural loss of fluid from the male organs of procreation. The disease commonly begins by involuntary nocturnal emissions, which at first can scarcely be called morbid. Every one possessing a smattering of physiological knowledge is aware that the genital apparatus in a state of health *must* elaborate semen; and when the seminal ducts and reservoirs are filled, they should be emptied. The natural process of discharge is effected by coition, and if that be not permitted, the semen is either taken back into the circulation by absorption, or is lost by an emission provoked illicitly or by a lascivious dream. Whether the presence of a superabundance of fluid in the seminal vessels tends to call up the appropriate dream, is of no use to inquire at this time. Certain it is, however, that an emission under such circumstances, instead of being evidence of disease, is really proof of vigorous health and the proper performance of the functions designed for the genital organs. An emission, then, once in two or three weeks from a healthy adult male, is not to be regarded as the result of a morbid state, but as perfectly physiological. But the emissions may become excessive from some cause. An emission instead of occurring once in two or three weeks, takes place several times a week, and finally several times a night, and during the day. Under such circumstances the strength of the patient's body and mind are rapidly wasted. The nervous system becomes so debilitated that the mucous surfaces usually the seat of erotic sensations, do not recognize the passage of the seminal fluid over them by any pleasurable feeling.

The disease was not much written upon by the ancients, though it is referred to in Genesis and Leviticus, as well as in the works of Hippocrates. Until quite recently, it has received but a passing notice. Of the late writers who have distinguished themselves most in treating upon spermatorrhœa are Lallemand of France, and Curling of England. Undoubtedly the silence which has hung over the disease has depended principally upon its uninviting character, especially to the fastidious. Very lately, however, the boasting pretensions of the basest charlatans have led even the fastidious to join in attempts at rescuing from worse than bandits, the treatment of this unwelcome malady. The sense of repugnance created by contemplating the miseries of the disease, bear no comparison to the utter disgust excited by reading the advertisements which are allowed to pollute our secular prints.

Although the cases of inordinate seminal flow are extremely common, and the results pernicious, the disastrous consequences that have been ascribed to them, have in my opinion been greatly exaggerated. Certain writers would lead us to believe that a majority of all cases of insanity were induced by an excessive seminal waste. That the inmates of lunatic asylums are addicted to the vice of masturbation no one will deny who is acquainted with the effects of imprisonment upon the sexual passions; but the mere fact that inmates of lunatic asylums have this vice, no more proves such to be the cause of the insanity, than that the crimes committed by the inmates of jails were owing to the vice in question. Both classes are incarcerated, and both are given to self-pollution. Dr. Brigham of Hartford, who has had great experience in insane cases, much doubts whether masturbation be a frequent cause of insanity. "I am aware," he remarks, "that the insane are frequently seen to practice it, and I know that in them it has, sometimes at least, most baneful effects, hurrying them to idiocy and death; but generally I regard it as the effect of the disease of the brain, which causes the insanity. A few years since, I caused much inquiry upon the subject to be made at the Connecticut state prison. I ascertained that there was scarcely an instance of a prisoner who did not practice it; many of them had for years, and some of them daily. I have no doubt it is a very common practice among prisoners, yet we seldom hear of one becoming insane from this cause. I never have heard of a single instance." Entertaining views somewhat in accordance with the writer just quoted, I cannot but think those in asylums for mental perversion and imbecility, are treated quite inhumanly when subjected to the "straight-jacket" and castration to overcome a habit which exists more as an effect of confinement, than as a cause of the mental defect. I would not be understood, however, as supporting the idea that insanity in those predisposed to it, is not hastened and aggravated by masturbation, for my convictions are to the contrary. The same I may say in regard to epilepsy; in those predisposed to the affection, or constitutionally susceptible to convulsive movements of an epilepsoid character, most assuredly masturbation, venereal excesses, or any other exhausting or depressing cause, would contribute to the full establishment of the disease. Many writers are of the opinion that masturbation is the immediate and principal cause of epilepsy, and seem to overlook the fact that constipation—one of the effects of onanism—produced by other causes may initiate the same morbid state. In a word, my observations have led me to ascribe to masturbation, from its general effects upon the constitution, hypochondria, missanthropy, and severe mental as well as physical ills; and it is the *indirect* agency of lunacy and epilepsy.

To suppose that masturbation is the only cause of spermatorrhœa would indicate a lack of knowledge hardly pardonable in a medical man. The causes of involuntary seminal discharges are so numerous, varied, and obscure, that to fully understand and appreciate them requires more than ordinary experience and acumen. One individual will endure venereal excitement almost to any extent without manifesting signs of mental or physical debility, while another is prostrated by what would be generally considered moderate indulgence.

The genital apparatus is the most complicated, highly organized and delicate part of the human organism; and, consequently, the most susceptible of abuses and derangements. It is placed in immediate relationship anatomically and sympathetically with the bladder and rectum, so that any disturbance of the one would influence the other. To comprehend, therefore, all the mysteries of the disease under consideration, would endanger a faulty therapeutic application. Boys who have been troubled with incontinence of urine, are quite apt to suffer upon arriving at puberty, with spermatorrhœa. What peculiar relationship exists between the two diseases, or why the one should follow the other, has not been clearly demonstrated.

It has been affirmed by men more given to speculative ideas, than to the careful investigation of pathological conditions, that the cerebellum holds a presiding influence over the genital organs; but there is no substantial proof that any such relation exists between them. It is well established, however, that suspension by the neck as in hanging, will induce priapism and seminal emissions; but what nervous connection or sympathy there can be between the genitals and the neck, has never been demonstrated by any physiologist.

Causes of Spermatorrhœa.—Masturbation is unquestionably the most frequent cause of spermatorrhœa; yet the disease may be produced by excessive venery; by urethritis or gonorrhace; by stricture of the urethra; congenital or acquired deformity, as phymosis and hypertrophied prepuce; sedentary habits; irritation excited in the perineal region, as by horse-back exercise, irritating sedimentary matters in the bladder; ascarides in the rectum; and by cutaneous affections. Many of the above conditions are but the effects of a more antecedent cause, viz: masturbation. This vice has not unfrequently excited inflammation of the urethra, which may be followed by stricture, phymosis, enlargement of the prostate, irritability of the vesiculæ seminales and the adjacent tissues.

Urethritis produced by masturbation may by sympathy of continuity be followed by inflammation of the ejaculatory ducts, vasa deferentia and by epididymitis and orchitis. Should the habit be partially or totally abandoned after the inflammatory state is established, and the symptoms be allowed to subside, the urethra and vesiculæ seminales will be left in such an irritable condition that emissions will take place from the least excitement. The indulgence of lascivious ideas, the reading of books containing such ideas, and slight friction of the clothing, are sufficiently effective.

Masturbation is often commenced at a very early age,—at an age earlier than might be supposed by those having given little or no attention to the subject. The vice once introduced, so weakens the genital organs and the nervous system, that as soon as the age of puberty has arrived, emissions will take place involuntarily. The exhaustion before puberty was not induced by loss of semen, but by unseasonable, intense, and prolonged erotic sensations.

Pathological Conditions.—I have had the opportunity several times of examining the bodies after death, of those who have long suffered from spermatorrhœa. In two instances death occurred while the disease was severe. In one case the body examined, was that of a mechanic who had long been exhausted by spermatic discharges which took place without erection or marked sensation. The final sickness was of only three days duration, and the symptoms were those of a typhus character. He was known to have had an emission a few hours before death. All the organs of the body were thoroughly examined, but only those presenting pathological appearances will be spoken of. The brain was examined first, as the head symptoms had been well marked in the last sickness. Upon removing the calvarium the meninges appeared very vascular and congested. This was found to extend over the upper part of the brain, but did not reach to the base of the organ, nor to the coverings of the cerebellum, nor to the medulla oblongata. Where the meninges were diseased they were much thicker than usual, and were adhered or glued together. In a word, the envelopes of the upper portion of the brain gave evidence of prolonged inflammatory action. The brain itself was unusually soft. The stomach was large, and appeared on the mucous surfaces as if scraped. The colon was contracted into knots, and did not have the natural calibre. (It should have been previously mentioned that the patient had been troubled for years with constipation, flatulence, and indigestion). The testes were small and soft; epididymis enlarged, and varices in left spermatic cord. The bladder was small and showed evidence of inflammation in the region of the trigone. The vesiculæ seminales were large, as well as the veins in connection with them, and both contained pus, some of which had undoubtedly been carried into the general circulation, producing the symptoms of typhus. The prostate was a third larger than in health, and its ducts were large enough to admit an ordinary probe and contained an unusual quantity of a very thin secretion. The mouths of the ejaculatory ducts were large, and quite patulous. There was no perceptible sphincter to their outlets, but they were so open that seemingly urine would set back into them. Their walls were thick, and no communication was discovered to reach them from the vesiculæ, though a band connected these organs with the ejaculatory ducts, showing that the original passages may have been closed by inflammatory action. The urethra was much dilated in its membranous and prostatic portion. In the bulbous portion there was a slight constriction from the natural size. It is probable that both urine and seminal fluid would collect and remain in the dilated part of the canal. Certain it was, that the patient had been unable to jerk off the last flow of urine spasmodically as it is usually done, but it would dribble away as though there was no ejaculatory power in the organ.

The second case was of a lawyer who had been troubled for eight years with spermatorrhœa, brought on by masturbation practiced in youth. He had been gradually losing vigor and spirits for the last three or four years of his life, and had been under the management of eminent medical men. He had been entirely impotent for three years, and had not enjoyed a complete erection for a much longer period. His general health was not bad, and probably would have been good had his mind been free from apprehensions of a distressing character. He committed suicide, influenced at the time of the act with the impression that his condition was becoming generally known, and that his mind and memory were likely to fail him.

A few hours after death his body was examined, and the following pathological conditions were observed. His brain presented the appearance of slight vascular injection; the stomach was large, but showed no morbid evidence of disease: the colon was contracted and appeared as that intestine does in obstinate constipation. One testicle was so far absorbed that little was left but the contracted tunica albuginea; the corpus Highmorianum and secretory portion of the gland seemed to be lost by atrophy. The other testis was rather small and soft. The vasa deferentia were exceedingly hard, but not ossified; the vesiculæ seminales were abnormally large and contained few if any sperm filaments. The ejaculatory ducts were thickened and dilated. Their outlets beside the veru montanum were patulous and retracted, there being quite a cup shaped depression leading into them from the urethra. The prostate was double the natural size, and laid low in the perineum. The urethra was dilated all the way from the point where the penis is suspended from the pubic arch, to the neck of the bladder. Within the dilated portion of the urethra, was about half a fluidrachm of a thin muco-urinary liquid. From the strictured condition of the urethra at the place where the penis is bent across itself when in a flaccid state, this fluid could not well escape, and from the relaxed condition of the membranous portion of the urethra the force of the accelerator urinæ muscles could not be made to effect a discharge of what laid behind the narrow point in the urinary canal.

These cases led me to inquire more closely into the pathological condition of those affected with spermatorrhœa. Not unfrequently those suffering from seminal weakness have a strictured state of the urethra at some point, and a dilatation of the canal behind it. The mouths of the ejaculatory ducts are open and without contractility; the urethra is morbidly sensitive or actually inflamed; the bladder from continuity of mucous lining, takes on the same morbid state, and will not long endure the presence of urine. Frequent micturition, then, is one of the symptoms of spermatorrhœa. It may lead the medical attendant to suspect a urinary difficulty and to prescribe injurious remedies.

Of the many symptoms of spermatorrhœa, it is proper to mention a few before attending to the treatment. As in a majority of the graver diseases, so in this, the advice of the physician is not sought until there is something alarming manifested in the case. The sufferer complains most of headache, dyspepsia, and constipation, as well as weakness of the kidneys; he may deny any knowledge of seminal weakness, or the cause of it; his mind is incapable of connected effort, and in conversation he will fly from one subject to another, as if aware of his peculiarities, and apprehensive of discovery. He avoids society, especially that of the opposite sex, and is distrustful of his powers to entertain. In a more advanced stage of the disease there will be great physical and mental debility, and sometimes the nervous system will become so far deranged, as to admit of a convulsive state. A difficulty of the throat and lungs is to be expected, and the patient and his friends are fearful that consumption is about selecting him as a victim. A tremulousness of the nerves is to be observed, as there is after the excessive use of tobacco or other narcotics. Ringing in the ears is an accompanying symptom and the eyes lose visual power, and have motes or spots floating before them, as though amaurosis were to be feared, as indeed it is by inveterate masturbators. The breath gets fœted and scents like that of a person coming down with delirium tremens. He is horrified with the idea of impotence, and reads with hope the published lies of the harpies. And when the disease becomes so far advanced as to allow the semen to escape during defecation and after micturition, as well as several other times in the day and night without erection or pleasurable sensation, he gives way to despair, and contemplates suicide to end his troubles. The seminal fluid, if examined at this stage of the disease, will be found to contain very few if any spermzoons or those filamentous bodies which are necessary for procreation.

Note.—From want of space, the part of this article devoted to the treatment of spermatorrhœa, will be deferred till our next number.

SYNOVIAL CYSTS.—ENLARGED BURSÆ, GANGLIONS.

BY PROF. A. J. HOWE.

In the vicinity of the wrist, and sometimes near other articulations, small tumors form, which contain a jelly-like fluid. The non-professional in this country call them "weeping sinews," and the term is not entirely inappropriate. They are developed along the track of tendons, and rarely exceed the size of a filbert or of a pigeon's egg. They do not usually cause any pain, or marked inconvenience, consequently are not often presented for treatment. One of my lady acquaintances has had one on the tendon of the extensor of the middle finger for years, and refuses to submit it to any treatment. A homœopathic practitioner assured her he could remove it by administering medicated pellets, but after taking them for eighteen months, she concluded that nothing would ever do it any good. She makes it her pet disease and is sure to exhibit it to every physician who falls in her way, and very graciously inquires what is *his* opinion of it.

Little is known of the early pathological action under which these cysts are produced. The commonly received notion is, that the wrist gets a strain which is followed by the ganglion. But from the observations I have been able to make upon the few cases I have found in the dissecting room, I am satisfied that at first there is a protrusion of a minute portion of the inner layer of the synovial bursa through an opening or rent of the outer and denser layer. This *hernia*, at first not larger than a pin's head, increases in size from secretions of its synovial surface, and the outlet through the neck of the sac becomes obstructed by adhesions, so that the accumulations find no means of escape. From that time forward the tumor increases gradually in size until its maximum is reached; a condition regulated by the density of the sac, which finally reaches so dense a state, that the pressure from accumulations within fails to distend it further. The fluid in the cyst at first is serous, but gradually increases in density until it is as firm as thick jelly. It is quite colorless, being as transparent as the crystalline lens. Some surgical writers assert that these ganglia often contain rice-shaped bodies as hard as cartilage, but I have not yet found them. I cannot see, however, why such bodies may not form in enlarged bursæ, as it is certain that similar bodies, called "false cartilages," are developed in many of the larger articulations, and especially within the knee joint.

Mr. Paget, in his "*Lectures on Surgical Pathology*," (page 345), regards these ganglia as "Cystic transformations of the cells inclosed in the fringe-like processes of the synovial membrane of the sheaths" of tendons; but speaks as though they may sometimes be simple enlargements of bursæ naturally existing. In the latter condition it is not uncommon to find the tendon itself enlarged along the track of the bursa.

But there are other forms of a similar disease. I refer to a protrusion of the synovial membrane connected with the articulations. Tumors thus produced may have some semblance of the simple synovial cysts already spoken of; yet their contents are thinner, more fluctuating, and afford more or less crepitation when manipulated. This is hydrops articuli or dropsy of the joint, though the protruding portion of the sac may extend along the course of one of the tendons and appear much like a synovial cyst. The difficulty oftenest arises from a strain of the tissues of the joint, and is attended with some pain and much weakness of the parts involved. It is in these tumors that the loose oval or seed-like bodies like cartilage, are found, though they are not a certain complication. Several of the joints may be affected with this disease, but particularly the wrist, ankle, and knee. The smaller articulations come next in order of frequency.

Another variety of the synovial tumors may be alluded to in this connection. I refer to those large sacs which form over the great trochanter of the femur where the tendon of the gluteus maximus passes. The synovial membrane is placed here to obviate the friction that would otherwise attend the gliding of the tissues upon this prominence of bone. The bursa is not unfrequently large, and from its tension resembles a common fibrous tumor. Its nature is to be inferred from the obscure fluctuation that may be elicited, and from the situation of the tumor. And if much doubt exist in the case, the exploring needle may be resorted to.

Continued pressure upon any bony prominence, as walking upon some parts of the tarsus in club-foot deformities, will be followed by a large callus, and this in time will have a bursa developed beneath it to obviate friction. The servant girls of Europe are in the habit of resting their weight upon their knees while scrubbing. The custom is often followed by an enlargement just below the knee-joint. The tumor thus formed, soon has a regular synovial bursa which may prove troublesome by interfering with the free motion of the combined tendon of the extensor muscles. The difficulty is generally called *housemaid's knee*, from the class of individuals subject to it. There is not much danger to be apprehended from this affection, unless inflammation excited by it becomes extended to the articulation.

Treatment.—The treatment of synovial cysts or the difficulties first spoken of, has been somewhat ludicrous. Many persons have been induced to give the tumor on the wrist a smart blow with the back of a book or with some other heavy body, they being told that such treatment would result in a cure. The plan is barbarous in the extreme, and often results in much harm. I remember of having been told that a piece of sheet-lead bound snugly upon the tumor would effect a cure, and have seen individuals undergoing the treatment. Whether either of the above plans ever resulted in a cure I am unable to say, but presume they did. There are cases of cure by such treatment reported. The blow, however, must effect a rupture of the cyst to allow the synovia to escape into the surrounding tissues, or no cure would result. But such a blow is likely to do mischief to the adjoining structures, or be followed by a high grade of inflammation.

The plan of binding a covering of lead upon the tumor is almost always attended with failure to effect any good. Besides, continued pressure upon the tendons on the back of the hand, must impede the motions to of the limb and inflict a lasting injury. A better plan than either is puncture the tumor with a narrow bladed knife, like a tenotome, and evacuate its contents through the artificial opening by gentle pressure. The knife may be made to enter the tumor subcutaneously, beginning at some distance from tho walls of the sac. A recurrence of the disease is prevented by binding upon the site of the tumor a compress. This is to remain for eight or ten days, when in a majority of cases the cure will be found complete. If, at any subsequent period, the cyst becomes refilled its contents are to be dislodged in the same manner as before, and a wooden probe dipped in the tincture of iodine or almost any other irritating fluid, is to be carried through the puncture and applied to the inner walls of the sac. This will excite a sufficient amount of inflammation to ensure adhesion of the walls of the tumor.

In cases of simple enlargement of the sheath of a tendon the same plan may be followed, though it has been affirmed by surgical writers that there is danger of exciting injurious inflammation among the tendons. But such writers had in view the treatment by injections of irritating fluids which might become diffused through the thecæ of the tendons. As the walls of the tumor cannot well be dissected away without doing injury to the enclosed tendon, much speculation has arisen as to the best plan of treatment in cases of simple dilatation of the sheaths of tendons. The local application of vesicants has been recommended, yet their real utility is very much questioned. The tincture of iodine does no more towards exciting absorption of the fluid of such tumors, than the tincture of catnip. And the common irritating plaster would be as little indicated as tartar emetic ointment, and either may be worse than useless.

In those cases of synovial collections about the larger joints which will allow of it by having a large protrusion at some point, the protruding portion of the sac may be transfixed with a curved needle, and have a thread drawn through, which may be left until the process of cure is well progressing. Besides the use of the thread, continued pressure should be applied by means of a bandage, and rest enjoined.

When large bursæ form, as over the trochanter major, the patella, and other parts not immediately involving an articulation, their contents may be removed with a trocar and canula, and the sac irritated with some appropriate and convenient injection. The use of the tenotome and the wooden probe, as advised in the treatment of the smaller ganglia, will answer as good a purpose.

When an individual having enlarged synovial cysts becomes afflicted with venereal disease and it is allowed to reach the constitutional form, operative interference, until the virus is eradicated had better not be resorted to lest the force of the malady be locally determined. It is well known that syphilis, in its advanced stages, will sometimes affect the sheaths of the tendons, causing thickening of them, as well as enlargement of the tendons themselves. To puncture such swellings and follow up the means of cure advised for synovial ganglia, would be attended with certain failure, if it did not produce absolute harm.

Velpeau, after dwelling at some length upon the treatment of synovial cysts, sums up the plans he recommends, about as follows: He would treat them with topical resolvents; blisters, if the resolvents fail; continued pressure, in case the foregoing means fail; by bursting the tumor with the thumbs or mallet when compression proves futile; by subcutaneous, puncture in case the attemps at crushing do not avail, or are inapplicable; by injections of iodine whenever practicable; and by free incision in obstinate or complicated cases. And he rejects as useless or dangerous, extirpation, caustics, and vinous injections.

It would be a pity if some of the above expedients did not prove effectual. Certain it is, that few patients in private practice would submit to a third trial or experiment, two having previously failed. Therefore, in a majority of instances it will be best to adopt that method first which is most likely to be successful. That method is unquestionably by puncture, and pressure over the site of the tumor.

EDITORIAL DEPARTMENT.

THE MEDICAL PROFESSION IN AMERICA.

To cross unknown seas, encounter wild beasts and savage men, and a nature and clime more difficult to be controlled than either beast or man:—To subdue the forest, reclaim the wilderness, people the prairie, and to force from the bosom of the uncultivated soil, the products necessary for the sustenance, and the comforts of civilized life—engaged the primal attention of the early settlers in America.

The emigrant found himself often, empty handed, thrown upon his own fortitude, energy, and perseverance. Firmness, perseverance, and individual personal dependence, were his best, and frequently his only friends.

It is not easy to exterminate savage animals, to battle with the lurking Indian, to cut down the monarchy of forest, to drain swamps, to open the wilderness, and in place of it, to make a home; to protect the family fireside and train domestic animals, and at the same time give the mind to the acquisition of an education, or the disquisition of questions of subtle metaphysics, or the investigation of fine drawn and doubtful hypotheses. The field of timber, the log-hut, or even the log-school-house, are not favorable for the training of dreamers to think and talk abstractions, to make poets, or imaginative speculators.

In the archives of the swamps are preserved the ancient records of the past; but while they send out death-dealing exhalations, and harbor noxious reptiles or savage beasts, they cannot be deemed the proper fields for the industry of the antiquarian or philosophical historian.

The earlier pioneer of American civilization was *compelled* by circumstances he could not control, circumstances sustained by the strength of nature, past and present, to hold the axe in his hand, in place of the volume of the philosopher, and to have the rifle at his side in place of a lexicon. And even as his difficulties were overcome, and his long labors were rewarded with a fair amount of prosperty and ease, local and national requirements for improvement were so great,—so many stumps of trees were to be uprooted, so many streams remained without an arched pathway for the traveler, so many *material* matters demanded his attention and his efforts, that his mind and body were kept in so continuous activity on the physical and the real, as almost to exclude the consideration of the mental or the future. The leisure moments left for literary culture, or investigating and mastering the workings and products of others intellectual efforts, were few indeed.

Hence, the American people, and especially American Physicians have been too much inclined to allow others who have had more leisure than they, to do so large a share of their thinking, to construct their hypotheses, their philosophy; and particularly to conduct those experiments and make those observations from which pure scientific theories are constructed.

The literature of the profession, even to the present day, to a very great extent, has been of European origin; or American imitation of European writers. And our Medical Colleges have, as we think, too closely copied the modes of teaching, as well as the modes of thought and the philosophy of our brethren of Europe.

It is true, we are not simple copyists of the English, Irish, German, French or Italian Schools of Medicine; but our medical literature and our medical doctrines, too often partake of the characteristics of those of one or other of these nations. Sometimes the distinctive and peculiar views of several different schools of medical philosophy are found strangely blended in the mind of one person.

We have been too *receptive*, and have not given the opinions presented to us the amount of reflection their importance demanded, ere we could safely accept them as our own. We have not only *entertained* the opinions offered us, but we have too often *adopted* them without first having put them to the severest tests. Our medical men have not given to our medical philosophy sufficient of the impress of their own minds.

The profession of this country have not generally assumed that *individuality*, that *new* life, eclectic in its nature, which accepting all that is established and will stand the test of science and pure reason,—all this kind of product, the result of the researches, the observations and the speculative thought of other nations; developing therefrom that unique system of medical pihlosophy, which is the *ideal* of the universal mind of man, and which we have frequently attempted to indicate by the term Rational Medicine.

But while we can discover some things in the past, that, although the result as we think, of inevitable and uncontrollable circumstances, circumstances ordered by the Ruler of the universe, which we desire should cease to exist, we can clearly see that these very circumstances give evidence of very much which is hopeful for the future.

The realization of the world's *ideal*,—the fulfillment of the high destiny of presenting a truly rational and scientific system of medicine, appears to have been reserved for those American physicians who have dared to do in medicine, what long since has been done in religion,—assert their individual independence, their freedom from the thraldom of cliques, parties, or organizations; and have protested against all attempts, from whatever source, to control or govern their professional opinions or actions.

To the fulfilment of the high destiny of giving the world a *Science of Medicine*, rational, free from the trammels of the past opinions of the profession, and yet embracing all of those past teachings and discoveries which can stand unchanged, the tests of time, of reason, and of modern scientific investigation, the profession in America appear, to have been called.

As has been said, the profession in all parts of the world have hoped for the realization of this ideal, the fulfilment of this destiny; have prayed for the arrival of the time when it could demonstrate that medicine is a *science* in the true meaning of the word, and not merely a collection of plausible hypotheses and shrewd guesses:—certainly not, as too many desponding minds have been led to suppose, a mere collection of errors of experience, of errors of observation, and of at least doubtful utility.

At the present time, for originality of thought, for abstract speculation, for erudition and culture, the physicians of Germany stand unrivalled in the profession. France stands prominent in a professional point of view for investigation into the actualities of physiology, pathology, and therapeutics. In France nothing is denied thorough investigation, but nothing is admitted as true until it is proved true, and even on the most abstruse points, the *mathematical* test is brought to bear with unswerving inflexibility and exactitude.

In all countries, the profession are doing much toward working out the glorious problem of the science of medicine, which to us seems destined to be perfected in America.

Here, many are freed from the bonds which nationality imposes. Here is the common reservoir in which meet and commingle, and are moulded into one common mass, the peculiarities, the observations, the thoughts, ideas, and hypotheses and systems of all nations, sects, and parties in medicine. In the great brain of the American profession, is this mass of matter to be smelted, and after the fusion of all the pure elements, and the rejection of the dross and refuse, will the pure stream of molten metal be cast in such form as accords with nature, with humanity, and eternal truth.

The feeble attempts which from time to time are made, to bring us again under European rule; to supply our minds with only European thoughts, will soon prove powerless. The destiny of the American medical profession cannot be changed by such attempts. That eclecticism which throws off all trammels but its allegiance to truth, to science, to humanity, and to God, cannot be influenced thereby; for, "What God decrees, man cannot alter."

BOOK NOTICES.

A Treatise on Fractures. By J. H. Malgaigne. Translated from the French, with Notes and Additions. By John H. Packard, M. D. Philadelphia: J. B. Lippincott & Co., 1859.

The importance of elaborate treatises upon the different branches of surgical science cannot be questioned. Already there are such upon the several subdivisions of surgery, and none are more serviceable than those upon dislocations and fractures. The work of Malgaigne was brought out to supply a gap in French surgical literature; and the facilities afforded that truly scientific surgeon for the investigation of fractured lesions, enabled him to present a treatise in no way inferior to those of his foreign cotemporaries.

The translator has made from time to time such observations upon American practice, as seemed to him necessary. The annotations are not particularly valuable, but altogether they have made the work more desirable to those who are not already in possession of the information to be found elsewhere.

The illustrations are wood-cuts, which it may be casually remarked, are the best to represent almost any surgical case. But these, unfortunately, are taken from lithographs, a variety of pictures that never can be successfully used in the delineation of natural objects. Lithographic representations, as the artists express it, appear "*smudged*," and seldom are made to give a distinct outline with good contrasts of light and shade.

A *Treatise on Human Physiology*; designed for the use of Students and Practitioners of Medicine. By John C. Dalton, Jr., M. D., Prof. of Physiology and Microscopic Anatomy in the College of Physicians and Surgeons, New York, etc., etc. Philadelphia: Blanchard and Lea, 1859.

No science has advanced more rapidly during the past few years than physiology. The investigations of Hall, Bernard, Bidder and Schmidt, and others have thrown much light upon those physiological questions of which comparatively nothing previously was known; questions too, that were of practical importance to the physician, as by them he was more or less influenced in his knowledge of pathology, and the application of remedies in the treatment of disease.

We have carefully examined the work before us, and are pleased to learn that it is not behind the science of which it treats. The author in his preface says: "It has been his object, more particularly, to present at the same time with the conclusions which physiologists have been led to adopt on any particular subject, the experimental basis upon which those conclusions are founded; and he has endeavored, so far as possible, to establish or corroborate them by original investigation." The work is divided into three sections:

1st. *Nutrition*:—Comprising the history of the proximate principles; the processes of digestion and absorption; the phenomena of the circulation, and the forces upon which it depends; respiration, and its influences; secretion; excretion; and the characteristics of the secreted and excreted fluids.

2d. *Nervous System*:—Bringing the body into relation with the external world, and preserving it from danger by means of sensation, movement, consciousness and volition.

3d. *Reproduction*:—The phenomena of which relating rather to the species than to the individual, are best understood when the circumstances pertaining to the individual have been fully considered.

It is the best work upon physiology with which we are acquainted. All hypothetical topics and unsettled questions are omitted, and it comes to the physician laden with such facts as are valuable to him in a practical point of view. The illustrations, of which there are many, are original; and we do not, as we turn its pages, see those old familiar cuts so often filling new books,—valuable only for their antiquity; but the writer says "they were prepared with special reference to the subject-matter." In mechanical appearance it cannot well be excelled.

Illustrations of Typus Fever in Great Britain, the result of personal observations made in the summer of 1853, with some remarks as to its Origin, Habits, Symptoms, and Pathology; to which is added, a Brief Account of the reappearance of Typhus in Boston in the winter of 1857–58. By J. B. Upham, M. D. Reprinted from the Boston Medical and Surgical Journal.

As the substance of this monograph appeared in the numbers of the Boston Med. and Surgical Journal we perused it with no small degree of interest; and are well pleased to have it more widely circulated in pamphlet form.

The symptoms as observed in a great number of cases, are detailed with minuteness and exactitude, and the effects of treatment observed and reported with judgment, and indications of more than usual clearness and discrimination.

In regard to typhus fever as it appeared in London, it seemed peculiarly a disease of poverty, deprivation and misery, oftentimes confined to individual localities and particular buildings, with foul pestilential atmospheres, and crowded with wretched, filthy persons, and with an atmosphere in most respects resembling the between-decks of an emigrant ship.

It seemed to be eminently infectious, but not contagious in the sense with which the term is applied to small pox; or that it invariably attacks those who may be exposed to its influence. As a general rule, the infection attacked those who were crowded together, as patients in a hospital, accumulated in ill-ventillated or pent-up rooms, and who had been debilitated by poverty, hardship, want, excesses, anxiety, fear, or despondency, or other depressing or exhausting influences. Hence the general character of the disease was that of adynamia, or an exhaustion of the vital forces.

The pamphlet appears quite incomplete, as but very little is said in regard to the *treatment*, the reader being referred to what was published some ten years since; and the Appendix, which would be extremely interesting, being entirely omitted.

The Science and Art of Surgery. Being a Treatise on Surgical Injuries, Diseases and Operations. By John Erichsen, Prof. of Surgery in University College. An improved American Edition. Philadelphia, Blanchard and Lea, 1859.

Those in need of a general guide to surgical practice will not find in any other book so much matter that is reliable and practical, and so little to condemn. We would not, however, be understood as pronouncing this as any where near a perfect surgical work. It contains little concerning what is called the modern plan of treating dislocations and fractures; and it is a fault of the work that the author has devoted too little space to what is ordinarily denominated minor surgery, and more than is necessary for the ordinary practitioner to those worst forms of disease which are oftenest found in large hospitals. The medication, when any is advised, is not the safest and most approved, yet until a better is out, we shall recommend this work as a text book.

A Treatise on the Venereal Disease. By John Hunter, F. R. S. With copious Additions by Philip Ricord, Surgeon of the Hopital Midi, Paris. Translated and Edited with notes by F. J. Bumstead, M. D., etc. Second Edition revised; Philadelphia: Blanchard and Lea, 1859.

A few years ago none of the peculiarities of venereal diseases were well understood. Whether the uninviting character of the malady was the main barrier to an investigation of this branch of pathology, we are unable to say. It is probable, however, that had something to do with it. The disease is an ancient one, but was not well studied until the time of Hunter. Although some of the views of that distinguished author and surgeon, have been "weighed and found wanting," as a general thing, his doctrines are very instructive. Were there not copious additions to the original work of Hunter, by Ricord, Babington, Bumstead, and others, it would be unsafe as a guide in the management of venereal diseases. But the annatotions of the distinguished men above mentioned, render this a work of great value. No man has done more than Ricord to elucidate correct laws in regard to syphilis. Making experiments fifty years after his great English predecessor, and having the most rare opportunities for conducting his cases under observation, much may be expected from his labors. A liberal share of the fruits of this deservedly eminent man's toil, is to be found in the book before us. Were we to express an opinion in regard to the pathological teachings of the work it must be this: although nearly the whole truth may be found on its various pages, to sift the true from the false requires too arduous study.

As venereal poison is becoming more and more complicated with other maladies, and diffused through a greater proportion of the human family, the medical man must give more attention to the general laws and treatment of this subtle complaint. And not to understand what has been developed by the researches of Hunter and Ricord would indicate a great deficiency of knowledge upon a highly important subject.

Second Annual Report of the Trustees and Superintendents of the Ohio State Asylum for the Education of Idiotic and Imbecile Youth: to the Govenor of the State of Ohio, for the year 1858. Columbus, 1859.

In the College Journal for April, 1858, we published an Editorial under the title "Unfortunates," in which we referred to the opening of this asylum the summer previous; and made some general remarks upon the efforts which had been and were being made throughout the civilized world, for the comfort and improvement of the unfortunate members of the human family; which remarks were received with marked favor, both by the profession and those connected with the press.

But there was *one* fact, as developed by personal observation, which was so opposed to the generally received notions on the subject, that we hesitated about bringing it prominently before our readers. In this report, Dr. Patterson, the very able superintendent of this asylum, has brought the matter so distinctly forward that we do not feel we should withhold giving the idea a broader circulation. He says:—

"In but very few cases of idiocy that have come to our notice, has the *form* or the *quantity* of the brain been faulty. Our pupils have almost invariably, fine, well developed heads. * * * *

"In a very few cases that have come under our care, the brain has been slightly deficient in *quantity*. In a few others its *form* has lacked that symmetry which we are accustomed to see in connection with a well balanced mind."

The entire matter of the connection of the form and size of the brain as an indication of the quality of the intellect, seems to demand thorough re-examination. The report is quite interesting and valuable.

A Practical Treatise on the Diseases of Children. By D. Francis Condie, M. D., etc. etc. Fifth Edition, Revised and Enlarged. Philadelphia: Blanchard and Lea, 1858.

This work has been so long before the profession, and has been received with such favor, that to commend it is a work of superrerogation. But the present edition has been carefully revised, and has had large additions made to it, so as to embrace, in the opinion of its author, a very full account of the diseases of infancy and childhood.

In no department of professional knowledge does the physician need to be more thoroughly informed than in those matters which relate to childhood; but, in none perhaps, could be discovered such lamentable deficiencies; and hence the importance of having always at hand the works of several writers on these subjects.

We are pleased to perceive that the author is quite plain and outspoken in regard to some things on which the opinions of physicians do not entirely coincide. Thus: On the value of belladonna as a prophylactic against Scarlet Fever; after giving the opinions of others who confide in it, he says:

"According to Dr. Andrew Wood of Edinburgh, recent observations, especially those made by Mr. B. Bell in Watson's Hospital, of that city, and by himself in Herrot's Hospital, would seem to prove that *belladonna neither prevented scarlatina nor mitigated its symptoms.*" Dr. Condie in regard to his own observations, says: "We never found it in any case to exert the slightest influence in mitigating the character, or preventing the occurrence of scarlatina."

This entirely accords with the observations of a large number of physicians, those of some of which are recorded on p. 68, Vol. III. of the College Journal; and if heeded sufficiently to prevent undue dependence being placed in the drug, to the exclusion of proper attention to hygienic and dietetic matters, might save the lives of some of those exposed to the influence of this terrible epidemic.

The Late Professor J. K. Mitchell, M. D. Inaugural Lecture to the course of the Practice of Medicine in the Jefferson Medical College of Philadelphia, delivered October 12, 1858, by Prof. Samuel Henry Dickson, M. D., L L D. Preceded by Preliminary Remarks to an Introductory Lecture to the course on the Institutes of Medicine, delivered October 11, 1858, by Prof. Robley Dunglison, M. D., L L. D. Published by the Class, Philadelphia, 1858.

The title-page fully sets forth the character of this pamphlet, whose pages bear ample testimony in favor of the heart and the intellect of Prof. Dickson; and justify the action of the Trustees of Jefferson College in calling him to the chair made vacant by the death of Prof. Mitchell.

The Transactions of the New Hampshire Medical Society, Sixty-eighth Anniversary, held at Concord, June 1st and 2d, 1858.

After the usual report of the business of the meeting, with the list of new members elected, choice of officers and the appointment of committees, the Annual Address of the retiring President, Dr. Twitchell, *On the duties of the Profession*, which is a very good one, was presented in full.

Then follows the Report of the Committee on Practical Medicine, chiefly relating to Typhoid Fever as it appeared in New Hampshire in 1856–7. Dr. Perkins of Marlow, says: "The treatment from the commencement of the epidemic to its close, was the same. And were I to go through another of the same character, I should rely on the same remedies, viz.; quinia, turpentine, brandy, and beef tea." The general idea in regard to the treatment of those who contributed to this report was:—that stimulants are often required at the outset, and nearly always during the convalescence. The Reporter, Dr. Thayer, said: "Calomel, antimonials, 'fever powders,' blisters, etc., appear to us quite unnecessary, and, worse than that, injurious."

The Report on Surgery by Dr. Smalley possesses but little of interest, owing to the few responses given to his circulars. Although he addressed nearly a hundred physicians, only three gave him any reply. Yet a slight reference to the history of the mode of *reducing dislocations by manipulation*, so fully discussed by Prof. Howe, in the College Journal for December, 1857, is given The credit of original discovery of this method, is erroniously awarded to Prof. Nathan Smith who undoubtedly taught it to the students at Dartmouth College before it was taught elsewhere.

An Essay on Debility by Dr. Ham, of no great value; one on Car buncle, by Dr. Laighton, with a Report of the Delegates to Dartmouth College; and an Address by the venerable Dr. Noah Martin, President elect, make up the remainder of the volume.

EDITORIAL ABSTRACTS.

Quinia in Scarlet Fever.—Dr. E. A. Morrison, says that he has frequently treated scarlet fever in the epidemic form during a practice of over thirty-five years, and that he thinks he has derived more advantage in its treatment from the exhibition of quinia, than any other remedy. He relates cases of the most malignant character in which this remedy was administered with the most happy results. When the first symptoms make their appearance, he at once orders quinia, and repeats the dose every two or three hours until the patient is under its influence. When indicated, he administers a suitable laxative to move the bowels, and swabs the throat with a solution of nitrate of silver. When the patient is old enough, he directs a gargle of red pepper tea and common salt.

To Elevate Undeveloped Nipples.—A German writer has advised coating the surface in the vicinity of the nipples with collodion for a distance of an inch and a half. The contraction of, and consequent compression from the collodion, causes sufficient protrusion to allow the nipple to be laid hold of by the tongue and lips of the infant. The nipple and a circle half an inch around it, should remain uncovered.

It is customary with nurses to pour hot water in a glass bottle so as to rarify the air and expand the bottle, and, after pouring out the water apply the mouth of the bottle over the nipple; when the pressure of the bottle, and the suction caused by the partial exhaustion of the air, will serve to elevate the nipple as well as draw a part of the milk from the breast. All the water should be poured from the bottle so as not to scald the patient.

Gleet.—The pathological state upon which gleet depends is commonly either a debilitated state of the urethra, or stricture. To attempt a cure of the difficulty before ascertaining by the introduction of a bougie, whether the latter state exists, would be running the risk of a failure. Injections will never cure stricture, therefore they will not cure gleet depending upon that condition of the urethra. An ordinary stricture can be cured by the daily passage of such sized bougies as shall thoroughly distend the contracted part of the canal; consequently a bougie will sometime cure gleet. And the medicated bougie will cure gleet depending upon debility of the urethra. A pommade composed as follows:

℞. Glycerine, f℥j.
Tinct. muriat. Ferri, f℥ss. M.

may be used to smear the bougie with before it is introduced. The mixture has a stimulating, astringent, and tonic effect upon the parts of the urinary canal with which it comes in contact. If the first bougie introductions be followed by scalding of urine, no alarm need be excited, as the extreme sensibility will pass off in a few days. The bougie alone will not unfrequently cure gleet depending upon debility or secretory irritation. But the injection of a decoction of hydrastis and geranium (the decoction being preserved with port wine) three times a day will aid the annointed bougie in the process of cure.

The Constitutional Treatment of Cancer.—Weedon Cooke in an article published in the Lancet, April 1857, gives a key to the successful treatment of this disease. He thinks the *vis medicatrix naturæ* is of itself sufficient in some cases to check the disease, and if this be the case, the means which we possess for encouraging the healthful condition of the fluids and solids of the body, would be the most effective in assisting the vital powers to stop the further progress of the disease.

He repudiates all medicines and dietetics which have the least debilitating tendency, and iodide of potassium, Velpeau's favorite remedy, he would not use unless in combination with iron, or some tonic to counteract its depressing tendency.

He considers iron above all other remedies, capable of effecting the greatest amount of benefit:—recommends also a mixture of lemon-juice and sarsaparilla as an appetizer; and a good nourishing diet of meat, beer, and a supply of vegetables, &c. He says: "The treatment of the mind is not less important; we find if we could eradicate the idea of the incurability of cancer, we should do much towards its cure."

Intermittent Fever.—G. M. Thompson, M. D., communicates the following, as his method of treating this disease:

℞. Tinct. Gelseminum, f℥ss.
Tinct. Aconite root, gtt. xx.
Sulph. Quinia, grs. x. M.

Dose 40 to 60 drops for an adult, commencing at the beginning of the chill, and repeating every hour until three or four doses are taken.

During the intermission he gives quinia and prussiate of iron; but if the patient is not anæmic he prefers the following:

℞. Sulph. Quinia, gr. xl.
Elix. Vitriol, gtt. xxx.
Sulph. Morphia, gr. vj.
Syrup of Ginger, f℥iv. M.

Dose one teaspoonful every three hours. An emetic or a cathartic may be given if indicated. He believes the only security against a return of the disease is removal from the malarious district.

Charcoal in Cholera.—In a report made to Dr. Wilson, Colonial Surgeon, New Zealand, he speaks of using charcoal in a great number of cases of epidemic cholera in its various stages, with much success. He says: "In the early part of the first stage, where there is only some anomalous feeling of malaise, attended by slight laxity of bowels, a few doses of prepared charcoal both by mouth and enema, and the exhibition on the succeeding day of an oil laxative, are sufficient means generally to check the further advance of the disease. He ascribes its virtues to its general antacid and absorbent property, as well as its controlling and correcting power over all ferments—vinous, ascescent, and putrefactive. Taken daily as a prophylactic the only inconveniences were its sudorific and constipating effects.

Chloroform in Delirium Tremens.—Mr. Curling, of the London Hospital, recommends chloroform very highly in this disease, having administered it in a great number of cases with none but successful results. He says: "Many practitioners prefer giving chloroform internally in this affection, sometimes combined with sulphuric ether; but when it is desirable speedily to obtain quietude and repose, lest the violence of the delirium should exhaust the patient and render the case hopeless, the best and safest results may be anticipated from the inhalation of a moderate amount."

Glycerine as a Local Application in Croup.—This may be applied "by pressing down and drawing forward the tongue with the finger, and squeezing the contents of a long, thick, camels-hair brush, dipped in the liquid, over as near as possible the chink of the glottis, and then swabbing the whole throat." A sponge or portion of charpie answers the purpose as well as the brush, and in many cases will be preferable. This is recommended as peculiarly valuable by Dr. Mayer and others, who have used it with beneficial results.

Apocynum Cannabinum.—Dr. Trent has reported six cases of ague in which he administered the root of this plant; and states that in two of them quinia had been administered without relief. His patients all recovered, and he concludes that this root is entitled to a higher position among the anti-miasmatic medicines than has hitherto been allotted to it. He administered the powdered root every two hours in doses of five grains in pill form, generally preceding the apocynum by a cathartic. From forty to sixty grains of the powdered root commonly proving sufficient to arrest the disease.

Sulphur for Plugging Teeth.—A French writer used melted sulphur for filling the cavities of decayed teeth. The metal is to be poured into cold water when properly heated, and it is then called "soft" sulphur. When thus prepared it is a soft elastic mass which may be moulded into pellets ready for use. One after another is pressed into the cavity until it is filled.

Felons.—Dr. W. H. Davis writes: I have been in the habit of aborting felons by the nitrate of silver. If throbbing has not commenced, I wet the felon and rub it well with the pencil, of "arg. nit."—about $\frac{5}{8}$ of an inch each way from the point where pricking is felt and have succeeded in four-fifths of the cases in arresting the disease. Still I doubt its general success in those cases in which the disease begins next the bone.

MISCELLANY.

ORTHOPEDIE OF THE HAND

Dr. Duchenne of Boulogne, at the last sitting of the Academy of Medicine, Paris, presented a patient, H. Dumas, aged 32, with whom a limited atrophy of each thenar eminence constrained or abolished the chief uses of both hands. We are happy to be able to give an exact account of this interesting case in the following communication:

On the left side, the abductor muscle and the antagonism of the thumb are destroyed. The subject still, however, sets his thumb against all the fingers with the aid of the external portion of his flexor muscle, which, at the same time, extends its last phalanx. But deprived of its abductor muscle he cannot incline his thumb sufficiently forward to bring its extremity in contact with those of the fingers, flexed on the metacarpals as in holding a pen, a pencil, a needle, &c. He can accomplish this only in placing the first phalanges of the fingers in extension, and their last two in flexion; in consequence of which there is very much difficulty in using his left hand. On the right side, the patient has lost, in addition to the abductor muscle and its antagonist, the flexor muscle of the thumb. When he desires to place his thumb against the finger, we observe the two phalanges of the thumb become flexed by the contraction of its long flexor; but its first metacarpal remains immovable. The functional difficulties of the right hand are the same as those of the left, only in a more decided degree. Thus, the patient who is a student of the fine arts, and a carver of wood, can neither draw, nor direct his compass, nor use his tools, &c. He writes with great difficulty and only by placing his pen between the index and middle finger. In short, the condition of his hands has obliged him to abandon his establishment, (he is a maker of marble sculpture,) and place himself in the care of the physicians of Paris.

M. Duchenne, of Boulogne, was of the opinion that the affection with which this patient suffers to be progressive muscular or fatty degeneration, which, we know, ordinarily tends to generalize itself, remains local in the diseased muscles. Unfortunately, these last appeared to him in great part to be fatty degeneration and would not permit him to wait the advantageous results from the application of electricity, especially to the right hand.

However, the functions of the hands have been restored by the aid of a very simple mechanical method; this kind of therapeutics forms the subject of the communication of M. Duchenne.

Enlightened by the new ideas which grew out of his electro-physiological researches on the hand, this ingenious experimentalist has conceived a very simple apparatus which perfectly supplies the action of atrophied muscles. The following is its description:—a finger of a glove is placed over the affected thumb, and a sleeve of copper is laced on the forearm of this side. A loop attached to this glove-finger at the level of the posterior extremity of the thumb, slides in a groove going along upon the posterior face of the articulation of the first and second phalanges, then it passes up again obliquely on the external side of the metacarpo-phalangeal articulation and of the thenar eminence in order to come out of its sheath at the level of the superior attachment of the abductor muscle of the thumb. In drawing upon this loop, the first metacarpal executes its motion of apposition, the last phalanx of the thumb extends itself, and the first inclines laterally so that the thumb is opposed to the first two fingers. This is the proper action of the abductor muscle of the thumb, the most useful of the muscles of the eminence of the thenar, according to M. Duchenne.

This little apparatus, he terms the artificial abductor muscle of the thumb; which, he says, is only an imitation of nature. (Here M. Duchenne relates the ingenious anatomical dispositions in virtue of which, the muscles of the thenar eminence, except the opposing, produce extension of the last phalanx at the same time that they execute the opposing movement of the thumb. This extension of the second phalanx is antagonistic to the opposite movement.) To put the artificial abductor muscle in operation, its free extremity is attached to a spiral spring which is fixed to a button fastened on the anterior face of the copper sleeve, and by which the tension is graduated.

M. Duchenne states that he has restored the use of the hand by the aid of a similar apparatus, among workmen who were attacked with a similar atrophy of the muscles of the thenar eminence; among others a young workman who had been sent to him in 1854 by M. Nelaton, and who, since he had used the instrument, managed his needle with as much skill as before the atrophy occurred.

But H. Dumas wears or tears with his implements of trade the glove finger on the right hand so quickly, that M. Duchenne has replaced it by a still more simple apparatus. This consists of a tube of vulcanized caoutchouc. which embraces the superior extremity of the first metacarpal, in the fashion of a ring, and passes up again obliquely toward the internal border of the wrist around which it is rolled. The caoutchouc is stretched more or less, the forearm being preserved from compression by a copper sleeve. For six months, H. Dumas has used this apparatus to write, draw, guide his compass, &c. The academy has seen it work successfully; however, M. Duchenne observes that it has some inconveniences: 1st. It exerts a circular compression on a very limited point of the thumb, and consequently interferes with the circulation. 2d. It has a slight action of extension on the last phalanx.

He concludes by saying, that the fact which he has related to the academy is only an example of the applications which he has already made of an old and too much neglected method, (orthopedy by elastic force*), in the treatment of several atrophied or paralytic affections of the hand, following the gifts which flow from his electro-physiological researches upon the hand. It is thus that he has been able to make amends for the action of atrophied interosseous muscles by means of artificial tendons, acting by the intermedium of a glove in the manner of these muscles. To give an idea of the mechanism of the artificial muscle apparatus, be placed before the academy a wooden hand of which the fingers and articulated phalanges executed movements simple and compound, the same as a living hand, under the influence of these artificial muscles put in action. These apparatus are by no means expensive, being so simple that the patients have themselves made them.

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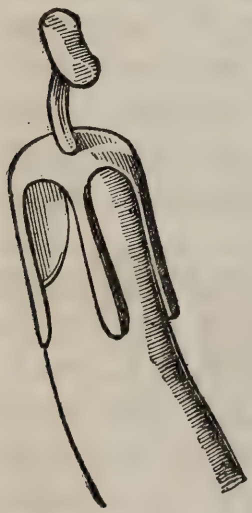
* For a long time metallic springs have been alone applied to this orthopedic method. In 1852, M. Rigal substituted vulcanized caoutchouc for them; it was a happy idea. "We conceive," says M. Duchenne, "that the apparatus presented before the academy, does not rest, as M. Rigal has thought, on the substitution of vulcanized caoutchouc for metallic springs, but on the practical deductions which he (M. Duchenne) has drawn from his electro-physiological researches."

AN EYE-HOLDER.

In various operations upon the globe of the eye, as removing from it scales of metal, or hot sparks from a forge or furnace, or in operating for a cataract, the surgeon needs to hold the eye-ball still and firm, and at the same time leave as much of its surface exposed to examination and manipulation as possible.

Particularly in operating for cataract where the lens is hard and needs to be extracted to allow of perfect vision, it is desirable not only to hold the globe firm while the cornea is being cut, but after the capsule of the lens is sufficiently opened, the operator needs to *compress* the ball so as to push the lens through the pupil, and thence out of the eye.

Both for the purpose of holding the ball firm, as well as to make compression in the operation named, the point of the finger is used; but it is often found to be too large, and not quite long enough to allow the necessary manipulations to be conducted with freedom and ease.



To obviate these difficulties the instrument delineated in the cut has been devised by Mr. Solomon. He values it merely as an *eye-compressor*, to be used in operating for hard cataract, but it can be made useful in many other operations upon the eye. As will be seen, it consists of a metallic *thimble*, as it were, for the finger, but made with only a shallow cup to set on the end of the finger, with four thinnish, somewhat elastic ribs extending along the finger, and which fix it firmly. From the centre of the part over the end of the finger, a stem arises nearly half an inch in length, slightly curved, and on the end of which is a concave piece of metal, placed at an angle with the bar, so as to allow of its easy adaptation to the ball of the eye. The instrument may be made of silver, or steel, and on the finger of the scientific and skilful operator, will be found of value in many cases.

POMMADE DE GONDRET

This is an ammoniacal caustic, composed of equal parts of lard and olive oil, to two parts of liquor ammoniæ. It was used by Gondret to excite a speedy revulsive action in cases of chronic affections of the brain, incipient cataracts, amaurosis, severe ophthalmia, &c. It should be applied in such cases to the forehead. The irritation produced by it externally relieves the parts within. Prof. J. M. Carnochan has used this pommade with success in cases of amaurosis by applying it to the sinciput.

Instead of the pommade of Gondret a better preparation may be made as follows:

℞ Glycerine, f℥j.
Prussiate of potassa, grs. xxx. M.

This may be applied upon the forehead with a camel's hair pencil two or three times a day. It produces some irritation of the skin, and quiets the deep-seated pain.

DRESSINGS FOR BURNS.

A writer in a late number of the *London Lancet*, advises a mixture of collodion and castor oil,—two parts of the former to one of the latter—as an application to recently burned surfaces. The remedy, the design of which is to shield the raw parts from the atmosphere, may be applied with a swab or camel's-hair brush, and as soon as this has dried, which it will do in a few minutes, another coating may be laid on. This dressing is to be applied as soon as practicable after the accident, and no other application need be used, until free suppuration is established, when a poultice will serve to soften the *artificial* skin; and then a current of water squeezed from a sponge will wash it all away.

Glycerine and collodion have been recommended as a similar dressing; and is actually better and cleaner than the combination with castor oil, though more expensive. Either of these dressings form a complete and transparent covering. A thick mucilage of acacia has been used as a shielder upon burnt surfaces. Indeed, there are a thousand and one dressings for burns; and the main object should be to select the least objectionable. At the Carron Iron works, in Scotland, a preparation of equal parts of flaxseed oil and lime water, is kept constantly on hand, and extensively used in the treatment of burns. In other places where burns are frequent the same liniment is used, which often takes the name of *Carron oil.* White lead and linseed oil—*white paint*—is highly recommended, and often applied as a specific in the treatment of burns; but the lead has been absorbed in quantities to produce local and general poisoning and paralysis.

Among the most objectionable of the common dressings, are powders of various kinds. They first become doughy, then by drying, cake and form a rough crust-like covering which through the irritation it produces, excites an unnecessary amount of inflammatory action. Next to the powders in point of unfitness, are poultices, which are heavy, allow of large accumulations of pus, become rancid, and interfere with the cleanliness of the patient and the dresser.

Water, warm if the patient labors under much shock, and cold after reaction has come on, is a good dressing, especially in the early part of the treatment before suppuration has set in. Afterwards, the calamine ointment of the Dispensatories, mixed with enough stramonium ointment to render the application somewhat sedative, forms one of the most desirable dressings that can be devised. The stramonium makes the parts smart at first, but soon exerts its peculiar influence; the zinc checks the profuse and often very exhausting suppuration; and the unguents with which these agents are mixed serve as a shield to the inflamed parts. Those exuberant granulations that push up between the bands of inodular tissue in the healing process, may be touched daily with perchloride of iron, until they subside and coalesce with the surrounding structures. No agent will in any great degree obviate the contraction which ensues during the cicatrization. Extension effects little, as the tense bands become fissured and long refuse to heal.

ADVERTISEMENTS.

A correspondent has discovered several matters of interest among our Advertisements, and wishes us to call the special attention of our readers to them. Many *new* ones appear in the present number of the COLLEGE JOURNAL and on its cover, all which are of interest to the reader.

MARRIED.

On the 5th of October, 1858, in Bellbrook, Green Co., Ohio, by the Rev. Joseph Newson, Dr. E. W. MAGANN, to Miss Ellen, daughter of JOHN M. SLAKIS, Esq., all of Bellbrook.

On the 6th of January, at Washington C. H., Ohio; J. WILSON CLEAVELAND, M. D., to MISS MARY E. WENDEL.

Also:—On the 18th inst., by the Rev. S. J. Miller, Mr. LOUIS C. STARKEL and MISS ANN BRYANT, both of the same place.

In Toulon, Ill., on the 25th day of Nov. 1858, J. DOYLE, M. D. of Elmore, Peoria Co. Ill., to Miss. SARAH A. NOYES, of Andover Mass.

DIED.

On the 2nd of January, at his residence in Pocahontas, Illinois, A. J. BUCHANAN, M. D.

At Hamilton, Ohio, December 12th, 1858, ELIZABETH S., daughter of Prof. S. H. Potter, in the twelfth year of her age.

THE

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ORIGINAL CONTRIBUTIONS.

WHY HAVE THE DESCENDANTS OF GREAT AND ILLUSTRIOUS MEN OF FORMER DAYS DEGENERATED?

[A Paper read before the N. E. Historic-Genealogical Society at Boston, Mass., Nov. 3rd, 1858.]

BY H. G. BARROWS, M. D.

A MERE novice in literature can hardly expect to present thoughts upon this subject, which are worthy the attention of the great minds composing this society; yet, as I have been placed upon the committee to consider the question, I am compelled to say something, if only out of respect to the appointment.

I have consulted no gentleman on this committe, hence can form no idea as to what course of reasoning any one will pursue; therefore, should the opinions of any two of us harmonize, it must be attributed solely to independent views on the part of each, and not to concerted action.

A writer of no small distinction once gave publicity to the following sentiment, which to some extent meets a response in my own mind. "There are probably greater men who lie concealed among species, than those who come out and draw on themselves the eyes and admiration of mankind. If we suppose there are spirits, or angels, who look into the ways of men, how different are the notions which they entertain of us, from those which we are apt to form of one another. *We* are dazzled with the splendor of titles, the ostentation of learning, the noise of victories. They, on the contrary, see the philosopher in the cottage, who is patient and thankful under the pressure of what little souls call poverty and distress. They do not look for great men at the head of armies, or among the pomp of a court; but often find them in shades and solitudes, in the private walks, and by-paths of life."

In perusing the chronicles of the historians of the old countries, we find men accounted great because they are the descendants of royalty and lay claim to royal blood. It matters not how deficient in intellect they may be, how inactive in the promotion of the public weal, they claim royal descent, are invested with gorgeous apparel, and high sounding titles, and hence are accounted great by the uneducated or oppressed populace. *Such* greatness cannot live in America, where every man is a king, every school-boy a prince, every daughter of America a queen, and every school-girl a princess. Here are no hereditary titles, only such as education, general intelligence, and a love of country, earn for each possessor.

Nor do the great men of our country claim a distinguished ancestry, for, as the biographer of Henry Clay declares; Washington was descended from a family of country squires, Adams from a Puritan ancestry of unpresuming worth and undistinguished talent. From Franklin down to Hamilton, the master spirits of the revolution were men who achieved eminence for themselves, and did not receive it from pedigrees. Each carved out for himself a lofty niche in the Temple of Fame.

In every age of the world, in every period of our country's history, there have been great men;—great in the distinguished services they have rendered, and great in the possession of those virtues which characterize and distinguish the true man. It is also equally true, that in every period these great men have been few in number; yet they have been sufficiently numerous to carry forward and consummate those great enterprises for which a bounteous Creator in his wisdom has seemed to have made them his special agents.

I think the conclusion can hardly be avoided, that great men owe their greatness and the illustrious characters which they have acquired, to a series of Providential developments, or to certain contingencies which have arisen in the nation's history and which have marked the age in which they lived.

Look for a moment at "the foremost man of all the world," that brilliant star which arose near the banks of the Potomac, a century and a quarter ago. Washington was truly a great man; in his person and deportment indescribably dignified; in his temper humane, benevolent, and conciliatory. By what a singular train of events was he drawn from his obscurity, to become the savior of his country. At ten years of age left a half orphan by the death of his father, we trace him along through his adjutant generalship, to the high position of commander-in-chief of the armies of the United Colonies, where we find him fully engaged in those battles for liberty which resulted in the freedom of his country.

Look again at John Adams, the son of a substantial farmer, and who obtained the comforts of life by manual labor. We trace this son from the law-office to the forum, and thence through an untiring round ot labors for his country, to the Presidential Chair; until at length worn down with years, he surrendered himself to the embrace of death on the 4th of July, 1826, with the hallowed sentiment upon his lips: "Independence forever."

Look again at Thomas Jefferson, a great man in his time. He too, was left a half orphan when but twelve years of age. We trace him also from the law-office to the Presidential Chair, and we witness a life filled with acts of usefulness, prompted by a noble heart burning with love for his country. He, like the illustrious Adams, feel asleep on the same day; a memorable day to Americans:—on that day two bright stars went from their setting on earth, to their rising in Heaven.

Look at James Monroe, a man whose life was one continual scene of labor. After leaving the academic groves, we find him a cadet in the revolutionary army, whence we trace him through various gradations and offices of trust to the Presidential chair. He possessed an energetic, persevering spirit, a vigorous mind, and extraordinary powers of application. Full of years, filled with usefulness, he obeyed the voice of Heaven, and surrendered himself to death, on the 4th of July, 1831; and while the air resounded with acclamations of joy, on the anniversary of the day that gave freedom to our country, his spirit passed silently away to join the immortals who had gone before him.

Look a moment at Franklin, a man whose memory we are proud to honor. At ten years old a mere cutter of candle wicks and an errand-boy in his father's shop. We trace him along through a varied course; we find him Postmaster of Philadelphia, afterwards Postmaster General for America, then a commissioner to build a line of forts, and anon leading a body of troops; then we find him standing before the King, as agent to the Court of Great Britain; and then a member of Congress—and on the 17th of April, 1790, he quietly expired, closing a long and useful life of over eighty-four years.

"To gild refined gold, to paint the lily,
  To throw a perfume on the violet,
To smoothe the ice, or add another hue
  Unto the rainbow, or with taper-light
To seek the beauteous eye of Heaven to garnish,
  Is wasteful and ridiculous excess."

So would it be for me to attempt to say anything with the hope of adding to the brilliancy of those characters to which brief allusions have now been made.

It was a wise remark of a wise man, who said "Every age is marked by its own peculiar characteristics. In each age, therefore, some feature standing out prominently, has given to it its name". In the contemplation of the present, there is nothing which strikes the mind so forcibly, as the absence of any particular feature occupying a position so prominent as to indelibly impress its name upon it. Its character is summed up in one word,—Progress.

Never has the mind of man been more actively employed; never have greater results crowned his efforts. The animal, the mineral, and the vegetable kingdoms, have all been made to pay tribute to his searching inquiries.

> "Man has put forth
> His pomp, his pride, and skill;
> And made floods, seas, and earth,
> The vassals of his will."

We shall find, I think, in searchnig the histories of the past, that the great and illustrious were so in one direction, while but few were so in many directions. Mozart's greatness lay in music, whilst Goethe's was confined to poetry. Raphael was great in painting, whilst Newton was so in mathematics. Kant was great in philosophy, whilst Michael Angelo was equally so in statuary, architecture, and painting; and Leibnitz great as a philosopher, mathematician and jurisprudent.

I am forced to the conclusion, that we are all creatures of circumstance, and that to circumstances our ancestors owed all that was great or illustrious to their careers.

The glory of Greece in art, eloquence, and arms, is wrapt up in the lives of her Aristides, her Themistocles, her Phocion, Cimon, Sophocles, and Demosthenes. Rome, for centuries the mistress of the world, the proud ruler of an hundred and twenty millions, may be studied in all her dazzling splendor in the characters of her Cincinnatus, her Regulus, Cato, Cæsar, Pompey, Cicero, Virgil, and a host of such men. So of all countries, and all great events, both in ancient and modern times.

Is there a throne to be overturned? a Cromwel unites the agitated elements, directs them according to his own will, and by the might of his own mind, compels a nation to acknowledge him sovereign. So when America has to be severed from a powerful monarchy, and stand forth in the freedom of a free republic,—the wisdom that directed, and the energy that executed this grand achievement, may be found in Washington, Adams, Jefferson, and their cotemporaries in council and in field.

Had there been no throne to be overturned, Cromwel would never have been acknowledged sovereign: had there been no Republic to build, the history of the great achievements of our ancestors would never have been written, and they would have passed away in their turn, with but honor virtue and piety to gild their humble names.

How can we avoid the conclusion, I repeat, that the greatness of man is the result of circumstances.

Who has not read among the lives of great men, that of Roger Sherman. How was his greatness achieved? He was the son of a poor farmer; too poor to give him a liberal education, he could only avail himself of the limited advantages of a parish school of his time. For five or six years he worked at the trade of a shoe-maker, to which his father apprenticed him. How little did young Roger think of, or expect the promotion and patronage which he experienced in after life, when he was pursuing his studies in his youth. How often are changes and important results produced by the most trivial causes! A silent thought—often how big with future events! An occurrence unnoticed by you and me, to another, perhaps, is the herald of a new life, a new destiny. A little incident produced in Sherman a total change of aim and prospect. This incident is probably familiar to most of you. A neighbor of his had become involved in difficulty in settling the affairs of a deceased person, and was in need of legal advice. He related the case to Sherman and desired him to consult a lawyer in a certain town to which he was going on business for himself. He did so, and with so much apparent good understanding of the case, that this eminent lawyer, finding that Sherman was a shoemaker, advised him to turn his attention to the study of law. He did so, and became eminent, both as a lawyer, a judge, and a member of the general assembly of Connecticut. Nor was he less distinguished in another period of his life, in a broader field of action, as you will readily perceive if you follow him to the halls of the Continental Congress, as a statesman and patriot of the American Revolution.

I might proceed with illustrations of this point, but they would be similar.

Have the descendants of great and illustrious ancestors degenerated? If so, in what respects? It must be an intellectual, moral, or physical degeneracy. Do we live in an *intellectually* degenerate age? In an age when the fine gold has become dimmed? Are there around us no foot-prints of intellectual greatness to guide the steps of the more humble seekers after light and knowledge?

It appears to me that no previous age has been so distinguished for intellectual greatness as the present. The press has groaned under the weight of the scientific and literary works which it has strewed up and down the land. The various branches of art, science, and literature, have their teachers and eloquent advocates, each leading their disciples onward and upward to the temple of knowledge. How can an age degenerate intellectually with such faculties as we possess for intellectual greatness? Look at the present, and then call up the past. The great increase of aids to study lexicographical, grammatical, critical and archæological sciences have given to the students of the present century, that activity and efficiency which in the past would have appeared unattainable.

With the great mass of evidence by which I am surrounded, I cannot adopt the sentiment, that the descendants of the great and illustrious have intellectually degenerated.

Then, if not intellectually, have these descendants *morally* degenerated?

A celebrated divine once said, that in a country where nature, culture, and grace, issue the only patents of nobility, the subject of pedigree cannot be one of great social importance. Nevertheless, such is the power ot association, that, when any individual rises to distinction, we find ourselves spontaneously inquiring, What was his origin? Who were his progenitors? And how often are we disappointed, when we find his origin obscure, and his progenitors illustrious only for their virtues. And how apt are we to forget that no earthly distinctions can ennoble the morally vile; while he that inherits qualities that dignify *any* name, may look down with indifference upon those adventitious distinctions that may belong alike to the worthy and the unworthy, to the good and the bad.

To ascertain whether we live in a morally degenerate age, it is only necessary to look about us, and advert to facts.

Was there ever a period in the history of the past, when there was so much done for the moral and religious advancements of the race, as at the present time? How numerous the army of preachers of religion and morality?—look at the increase of Sunday schools;—see the many schools established all over the country for the moral, religious, and intellectual culture of those oppressed by poverty, and sufferers from neglect: what a vast number of societies, for the moral and religious improvement of young men, have sprung up in every city, and considerable town in the country;—what an increase of missionaries at home, who are engaged among the degraded portions of society, in the godlike work of elevating the human mind from its grovelling position, and teaching human souls the lesson of immortality; notice also the reformatory institutions peculiar to the present age, in which the lessons of accountability and morality are taught; behold the numerous army engaged in the cause of temperance, a work which must be done, a foundation which must be laid before the moral structure can be raised.

In answer to these things, I know it may be said, "still crime is on the increase." I can only reply, that if the objector will look over the statistics of a century ago, and take a careful view of the number of inhabitants, and contrast them with the statistics and the number of inhabitants of to day, I think he will find that it is an apparent rather than a real increase. Nor should he forget to take into the account the fact, that nearly three fourths of that criminality is imported; that it came in *to*, but is not *of* us.

With all the facts before me, to some of which I have alluded; with all these moral agencies at work, of which I have spoken; I am not prepared to admit that we have degenerated in point of morality.

There may be a sense in which we have degenerated, and that is physically, and even this may admit of a strong doubt; if so, the doubt goes in favor of the race, and we shall get the advantage of it. This point however, is a question for the physiologist.

To say that we have not in this century, human forms as handsomely moulded, exhibiting as noble and fair proportions as any in the past, would be uttering an untruth. We can say now of the men of the present age, what Shakspeare said to man in his time.

"What a piece of work is man; in form and moving, how express and admirable! the beauty of the world; the paragon of animals."

If it be argued that the men of the present century are shorter lived than their progenitors, we must look for a solution of the riddle in the customs of society, and in the dealings of man with his kind. The early hours of retirement and rising, doubtless, had much to do with the lengthened years of our fathers. The cares of business did not drive them into labor in those hours which should be devoted to rest. Men then, were honest in their dealings with their fellow men; in this age they are dishonest, but it is not counted an immorality, for it has been upheld by the sanctions of religion, and is not considered immoral by persons "professing and calling themselves Christians," but is known by the softer name of shrewdness, or tact for business, and money making. I allude to the dispensing of those articles which were intended in the goodness of God to sustain life, but which in this era exert quite a contrary effect. In the days of our fathers, they bought flour, coffee, grain-fed beef and pork; but we, their descendants, buy our flour, coffee, and other necessaries, only in name, and receive for our money villanously adulterated articles, pernicious to our health, injurious to our systems, and well adapted to engender disease, and consequently to shorten our days. Damaged meat, and sometimes diseased, and blood-fed pork, unfit for human consumption, are partaken of by us and our children, and we reap the results in diseases and premature death. But this point can be pursued no further at this time; these are but hints, and every physiologist, and physician will admit the truth of this position, and I think, sustain me. If the men, women, and children of the present age, being daily poisoned in this way, die, some of them before they should, it must not be used as an argument that the race has physically degenerated; nor if some of them reach the age of three score years and ten, or even a score beyond, before they fall asleep, it must not be used as an argument that these abominations are not practiced; but rather attributed to the fact, like cases that we have read and heard of, they possess in their systems a certain indescribable something which enables them to resist the deadly effects of poison when insidiously introduced into the system in small quantities. They form not the rule, but the exceptions.

If I admit the degeneracy of the descendants of illustrious ancestors, it is only in this sense that my mind will sanction it; and even in this view, it is doubtful whether this can be truly termed degeneracy.

We have in this present century as mighty minds, as brilliant intellects, as have ever shone forth in former ones. We have no Washington, no Adams, no Jefferson, who were so conspicuous in their day and generation. They have done their work, and gone to their reward. The neighing of the war horse is not heard in our streets; the booming enemy's cannon reverberates not along our shores; no moving mass of military, armed with implements of death, threaten to invade the sanctity of our homes? No! all now is peace. The horse and his rider are engaged in more useful employments; and the banner of peace and national amity floats over our heads. But should those times return in which our fathers made themselves famous; should our country be threatened and invaded as in past time, we should find a Washington in some faithful and patriotic representative, raised up by Jehovah for that purpose, as he was, who would lead our armies as he did, on through successive battles, to ultimate victory.

Should those times come upon us again, we should find an Adams, in some mental giant, some faithful lover of his country, who, in the forum would stir up his countrymen, and by his burning eloquence incite in their bosoms the undying flame of patriotism, and love of liberty.

To conclude, I can only say, that with all the evidence by which I am surrounded I cannot think that the sons of the present age are a whit behind the sires of the past, in what goes to make up nobleness of character, brilliancy of intellect, or beauty of physical development. But should the emergencies of a former century, be experienced in the present, they would call forth the hidden and unhidden greatness of our people, which would set the question of degeneracy forever at rest.

GELSEMINUM.

BY T. C. MILLER, M. D.

The remarks of Prof. Cleaveland, and Dr. J. A. Mayes, but particularly those of the former gentleman, have led me to make quite extended trials of gelseminum, and these have led me to concur entirely with the views of Prof. Cleaveland.

Gelseminum affects primarily the spinal marrow, and certainly those anterior parts of it from which spring the nerves of motion; and secondly the posterior portion of the spinal cord and the nerves springing therefrom, as well as that part of the brain from whence branches of the vagus nerve proceed, and thence to the heart and arteries.

So far my observations have been very clear and satisfactory, and I cannot convey the results of these observations better than by stating: Gelseminum causes a depression of the functions of the spinal cord, and an alienation of the functions of the heart. It affects the nerves which control the entire system of blood-vessels.

In small doses, gelseminum does not act very speedily, but in large ones its action is very prompt. It belongs to the speedy medicines in its action, and yet does not act like the narcotics. I am established in these views by repeated trials of large doses of it upon animals. In those cases where death was not caused immediately, the principal manifestation was a suspension of the functions of the nerves, and a derangement of the circulation. In those cases where death occurred speedily, it changed the medullary substance of the brain, and destroyed the vitality of the blood in the vessels and in the lungs. Its action on the blood was to produce a manifest derangement of its structure.

Gelseminum when its use is long continued, depresses not only the functions of circulation, but the processes of blood-formation, and in general, the whole of the processes of what has been called vegetative life; or those functions which depend upon the activity and health of the ganglionic nervous system, and which we know to hold intimate relations with the functions of circulation and assimilation. Hence it makes the blood less nutritious, as well as retards assimilation.

On dissection of animals killed by a large dose of gelseminum, I observed a constant hyperæmia of the lungs and brain, the right part of the heart and the large veins being distended with blood, and considerable congestion of the capillaries in the mucous coat of the intestines. The muscular fibres of the heart were dark, red, and soft. The blood within the ventricles was fluid. The substance of, and membrane covering the spinal marrow were filled with blood. The effects of gelseminum upon the nerves having control of circulation, are peculiar and strongly marked, reducing its activity, lessening the force and frequency of the pulse.

All my experiments have been made with the tincture of gelseminum. The *gelsemin* so called, so far as my testings have gone, has proved absolutely inert. I have made frequent trials with it, and like all the other "*concentrated* remedies," I find it entirely unreliable in therapeutics. The best preparation in my opinion is the tincture, kept in a black bottle, or a bottle covered with a black paper, to ensure it against the action of light. In summer, it should be kept in a cool cellar. With these precautions, it will retain its strength.

I have been succssful in the use of the tincture of gelseminum in intermittent, remittent, billious, and typhoid fevers. In inflammatory diseases, particularly of the organs of the thorax, as pleuritis, pneumonia, inflammation of the bronchial mucous membrane, and carditis, as well as in nephritis and matritis, and in inflammation of the texture of the nerve substance in prosophalgia and neuralgia, and in myelitis, I have found it of great value. In all cases of chronic inflammation with increased irritability and sensibility, it has proved serviceable.

In hemorrhages having the character of erithism, and particularly in spitting and vomiting of blood, or hemorrhage from the uterus; in phthisis florida or tuberculosa of young and excitable persons with a sub-inflammatory diathesis, in mesenteric tuberculosis of infants, in phthisis pituitosa, I have found it of value, and especially when combined with conium.

In chronic neuroses, as in pertussis, spasmodic asthma, in the convulsive and suffocating cough of the consumptive and dropsical, in cardialgia with irritability of the stomach, I give it in combination with cimicifuga. In some of these diseases, as well as inflammation of the stomach, in gastralgia, and in enteralgia, and painful affections of the liver, spleen, pancreas, kidneys or uterus, I give in connection with belladonna.

In scirrhous indurations of the glands, and in cancerous affections, and particularly in cancer of the uterus, in combination with a small quantity of conium as an anodyne, I have found it superior to any other known combination. In all growths where there is an increased venosity; in hypocondria, hysteria, mania; in painful swelling of the ovaries, or the prostate gland; in leucorrhœa and gonorrhœa, as well as in other forms of affection of the mucous membrane, it has proved useful.

I append some of the formulæ in which I have administered it.

In obstinate cough, and particularly in epidemic whooping cough:

℞. Tinct. Gelseminum, fʒj.
Tinct. Veratrum Viride, fʒij. M.

Dose from five to fifteen drops once in three hours.

In nervous and spasmodic attacks, with debility:

℞. Tinct. Gelseminum, fʒij.
Tinct. Scutellaria, f℥ss. M.

Dose, a half a tea-spoon full once in four hours.

In painful neuralgic affections, I have used the following:

℞. Ext. Belladonna, ʒj.
Tinct. Gelseminum, f℥. M.

Form a solution, and apply as a wash to the part affected.

In spasmodic hemorrhage from the lungs or uterus, I have given:

℞. Tinct. Gelseminum,
Wine of Ipecac., āā fʒij.
Ext. Hyosciamus, grs. jr. M.

Dose, from 20 to 30 drops once in two hours.

In ordinary hemorrhage from the uterus, I consider the best preparation I have ever administered, to be made as follows:

℞. Tinct. Opium, fʒss.
Tinct. Cinnamon,
Tinct. Gelseminum, āā ʒj. M.

Dose, 20 drops as often as from fifteen to thirty minutes.

I have used arnica, borax, bismuth, and other agents, in combination with gelseminum, in those cases where they were indicated, but as these will suffice to show how they have been combined, I omit many other formulæ used in my practice.

ON THE POWER OF THE MATERNAL IMAGINATION IN THE PRODUCTION OF MONSTERS.

BY DR. TURCK, OF PLOMBIERES.

[Translated by Prof. J. King, M. D.]

Several pages of Buffon's work are occupied in combating the popular belief which, in connection with the "longings" of pregnant females, accords to the mind a remarkable and sometimes fatal influence upon their yet unborn offspring; and this opinion of our great naturalist has been adopted by nearly all modern physicians. However, at the present day, the idea is being gradually abandoned, and the popular view is considered as being more in harmony with the facts.

The ancients fully believed in the power of the "longings" of pregnant women, and the curious transaction which passed between Jacob and his father-in-law, Laban, proves that the ancients considered animals as being subject to the same law. Ambrose Pare unhesitatingly admits the power of the mother's imagination as being sufficient to modify the form of her offspring, and convert it into a monster. He says:—"and therefore, at the moment of conception, and while the child is not yet formed, which is abont 30 or 35 days for males, and about 40 or 42 days for females, it is necessary that the mother neither sees nor imagines monstrous things, &c."

The prince of anatomo-physiologists, the illustrious Morgagni, after having cited a great number of monsters in perfect conformity with the peculiar thoughts or mental shocks which affected their mothers during gestation, adds:—"If, as you say, these results cannot be attributed to the mind of the mother, explain then, how and why they are produced. There are very many phenomena among the things of Nature which I should deny, were it proper for me to deny them merely because I do not understand how and why they are produced." Boerhaave, and Van Swieten relate several cases of monstrosities due to the mind of the mothers; and even previous to them, Paracelsus, admitting the influence of the imagination of pregnant women upon their children, invented a whimsical hypothesis to explain this fact.

One of the most distinguished savans of the age, Burdach, in his *Treatise on Physiology*, after having enquired if it can be admitted that the maternal imagination has an influence on the formation of the child, concludes thus: "The facts which have been related above prove that between the life of the mother and that of the fœtus, there exists so intimate a relation, which may be compared to that of animal magnetism, that the condition of the fœtus may be modifiedin a specific manner by that of the mother, without there being any necessity for a liaison, or for an organic union."

The learned physician, Prosper Lucas, in his *Philosophical* and *Physiological Treatise* on *Natural heritage*, admits not only the transmission or inheritance of form and character, but likewise that of the actual condition of the parent at the moment of conception. Hence, to admit that for a certain time during gestation the mother has the power of impressing her secret thoughts upon her child, cannot certainly, be very far from the truth.

There is, in Plombieres, a girl who was born without the hand and inferior part of the right forearm. Notwithstanding this infirmity, she is engaged in the service of a wealthy family of quality as chambermaid. A young laundress, her friend, during her first pregnancy conceived a decided aversion to her while she was collecting some linen together, and which antipathy continued up to the period of her delivery. She gave birth to a son, at this time thirty years of age, who, like the chambermaid, is an actromele, being similarly deprived of the hand and inferior part of the right forearm. A young married woman, also of Plombieres, and the mother of four or five children, at the commencement of a new pregnancy had a quarrel with a female addicted to intemperance, and whose right eye protruded beyond the orbit owing to a long standing hydropthalmia. During her pregnancy her mind dwelt with anger upon the ox-eye of her adversary, and she gave birth to a boy having an exophthalmia of the right eye, a perfect representation of the eye of the intoxicated woman. This exophthalmia was owing to a thick fatty cushion which filled the orbit.

At the 13th year of his age, the boy's eye, which descended below the cheek-bone, (the vision having been lost for several years,) became attacked with severe pain, which determined me to remove it. My friend, Dr. Keller, of Remiremont, conducted the operation, freeing the boy from a deformity which rendered him hideous. The youth is now in perfect health.

A few days since, I attended a female who had been insane for a few weeks. She has two children, one, a fine daughter ten years of age,—the other, a son of five years, whose figure is comely, and whose body and limbs are well developed with the exception of the hands and the feet. The hands have, each, only two fingers, the index and the middle; the other fingers are merely rudimentary. The feet, deprived of toes, are cleft in two as far as the astragalus, and in the form of a crescent. These monstrosities do not hinder the boy from writing readily, and from walking in the fields with his father. His mother has stated that at the commencement of her pregnancy she amused herself, at the suggestion of a neighbor, in irritating a small man with the claw of a large lobster. Since the birth of her son, she has believed that some one has placed a spell upon her; recently, she consulted a fortune-teller, who told her she had good reason to believe so, and named the man who had bewitched her. This is the cause of her insanity.

These facts are certainly very curious; the last is similar to a case related by Ambrose Pare, which I will quote. "In the year 1517, in the parish of Blois-le-Roy, in the forest of Bievre, on the road to Fountainbleau, I attended a child having the face of a frog, who had been seen and visited by M. Jean Bèlangier, surgeon in attendance to the king's artillery, in the presence of the judges of Harmois. . . . . The father's name was Esme Petit, and the mother Magdelaine Sarboucart. The said Bèlangier, a man of good mind, wishing to know the cause of this monstrosity, enquired of the father from whence it could proceed,—who stated, in reply, that, as he supposed, his wife had the fever, in order to cure which, one of her neighbors advised her to take a live frog in her hand and hold it until it died. That night she went to bed with her husband, still holding the frog in her hand; having copulated, she conceived, and 'through the influence of her imagination has this monster, that you have seen been produced.'"

Some years since, M. Donar, keeper of the baths in Plombieres, had a she-goat, which during the period of its gestation, became furious at the sight of dogs, and pursued them to the utmost, whatever might be their size. She gave birth to two kids, which had all the external form of dogs, and the proprietor, alarmed at such monstrosities, quickly gave them to one of his neighbors, who cooked and ate them. This fact passed within twenty steps of my house; I learned it too late to be able to personally observe it. But as it has been related to me by several persons worthy of belief, and without any variation of the circumstances, I must accept it for the truth. The learned Müller, in his *Manual of Physiology*, Chapter II, On the relations of the Soul with Matter, repudiates the idea that the mother's imagination can exert an influence upon her fœtus, among the reasons, because these two beings are only in juxtaposition. I know this as well as he; but can this juxtaposition prevent the nervous or electrical action of the mother upon her offspring? Who can affirm it? Let us then, accept the facts, and the popular belief which is based upon them; let us accept them, not merely to prevent the formation of monsters as far as possible, but to increase and ameliorate the aptitudes of our children by the aid of maternal imagination properly directed, as has been suggested by MM. de Frarière, and Dupont, who would, in this manner, commence education with conception, making it better and more powerful and effective.

This subject, which I have merely glanced at, is one of great importance, worthy the attention of serious minds; many volumes may be written concerning it.

THREE SUCCESSFUL CASES OF AMPUTATION OF THE THIGH.

BY H. A. PETERMAN, M. D.

Every day cases are occurring which demonstrate the superiority of the eclectic practice; and so strikingly has this been manifested in a few cases under my own observation, that I am disposed to lay them before the readers of the College Journal.

Case I. Miss S., twelve years of age, of Onondaga Co., N. Y., while at play, fell and injured her leg just above the knee. In a few days it became painful and swollen, and a "regular" was called to treat it. He pronounced the difficulty inflammatory rheumatism, and treated it accordingly, but without improvement. In the course of several months, suppuration formed about the knee, which found escape spontaneously. From this time there was some improvement until she was able to go out, when she fell a second time and fractured the femur at the place of the former injury. Another doctor of the same class was now called to assist the first in dressing the injury. Unfortunately for the patient and the reputation of the attending physicians, the broken bones did not unite, but the upper fragment found its way through the integuments. At this crisis the friends of the patient thought it time to make trial of some other practice, so they called in a homœopathist. But his promises to produce bony union with pellets, though they served for a while as placebos, soon turned out to be entirely groundless. He could neither keep the limb in position nor afford any relief, therefore the former doctors were called again, yet with no better success than before. As it is in many instances, so it was in this, that when a case becomes hopeless, the friends of the patient will keep changing medical advisers. By peculiar influences the services of the homœopathist were a second time in requisition. He treated the case for a while, but still without success. Thus a year passed without any satisfactory results, and the patient was reduced as low as a human being well can be. Finally an eclectic practitioner, Dr. Thomas, was summoned, who found the upper fragment still protruding through the tissues. He at once announced the only course that promised health was amputation; and if the parents were willing to acquiesce in his opinion he would take charge of the case. Consent being given he called to his assistance, Prof. S. H. Potter, who was then in the vicinity, and Dr. Marlett. They amputated some distance above the injury on account of the diseased state of the bone. The operation was performed in the autumn of 1855, and the patient made a speedy and happy recovery.

Case II. During the following spring Dr. Horton, an eclectic of an adjacent county, was called to see Miss R., aged 19, who had been given up to die by doctors of other schools of medicine. The disease was caries of the bones entering the knee-joint. Having called assistance, he amputated above the articulation, and the patient recovered without untoward symptoms.

Case III. In July last the same physician, assisted by Drs. Hoxsie, and S. A. and H. A. Peterman, amputated the thigh of a young man, aged 21. The operation proved to be perfectly successful, the patient recovering rapidly.

The history of the last case is somewhat interesting. At the age of three years the child was attacked with circumscribed swelling about the calf of the leg, which in time suppurated forming ulcers that degenerated into sinuses leading into the knee-joint. As is usual in similar cases the muscles became rigidly and permanently contracted, and the joint anchylosed. The fistulous openings eventually healed, but the swelling remained, and the pain was not diminished. He was treated year after year without any permanent relief. He dragged himself about on crutches, being totally unable to use the limb in walking as it was undevelloped and susceptible to pain upon the slightest touch.

About the middle of last May, a new state of the limb was by accident ushered in. The patient received a fall which fractured the tibia of the diseased leg near its centre. The limb was treated as is usual in such cases, and the fragments united perfectly. According to the treatment by contra-irritation deivitive action established at a distance from the articulation in cases of knee-joint affections, it might be supposed that this fractured injury would have proved serviceable to the old difficulty. On the contrary, the knee took on more than usual inflammatory action which seriously threatened the constitutional stamina of the patient. It was at this juncture that amputation was proposed and performed.

These three cases of amputation of the thigh, all proving successful, furnish the best of evidence that the eclectics of Central New York are equal to any emergency, and secure success. All of the cases had been in "regular and defective" hands, and nothing but prolonged suffering was received from either. I would not maliciously make invidious comparisons of the different schools of medicine, but by example establish the fact that as far as our district of country is concerned, the "rationalists" have it all their own way. Not only in surgery, but in ordinary practice, we can show unparalleled success.

POLYPUS IN THE HEART.

Messrs Editors :—

Wm. Young, M. D., of Deerfield, N. H., writes me that on the 19th of Dec., 1858, he made a *post mortem* examination of a Mrs. Harvey, who died at the age of 65. She had been treated for more than twenty years, by various physicians, for disease of the liver. The liver, however, proved to be perfectly healthy, but in the left auricle of the heart there was a polypus, more than half an inch in diameter, extending through the auricule-ventricular opening into the ventricle, and down the aorta for the space of three inches. In the right auricle there was another polypus extending into the inferior vena cava, and in connection with it a table-spoonful of pus. The patient was sick about ten days during her last illness.

The doctor asks the following questions: Can it be that she lived twenty years with a polypus in the right and another in the left side of the heart? Do you suppose a person could live ten days with a polypus in the left, and a polypus and a table spoonful of well formed pus in the right side of the heart? Are there any cases like it?

These interrogations emanating from an intelligent physician, engaged in an extensive practice, I most respectfully submit to the consideration of you and your numerous readers. The case is certainly an interesting one. R. RICHARD CLAY, M. D.

Note.—About four years ago I saw, by invitation of Dr. F. H. Kelley, of Worcester, Mass., a patient of his who had been in health up to a few days before, when he was taken down with symptoms of pneumonia. The attack of disease was not particularly severe, and in ten days or two weeks he was able to walk about the room, even going out of the house. But at length he ceased convalescing, and began to complain of difficulty of breathing and to cough almost continually. An examination of the thorax made evident an effusion of fluid into the plural sacs and pericardium. The sounds of the heart were observed, though nothing remarkable was heard. The closing of the semilunar valves did not emit a very distinct sound, but the obscurity was accredited to the fact that the entire organ was moving in a preternatural quantity of fluid. What remedies were ordered at the time, and afterwards, I do not now distinctly recollect as I took no notes of the case, but presume the treatment was judicious, as Dr. Kelley is a very successful practitioner. In a few weeks, however, the patient died, and I was invited by Dr. K. to assist in an autopsy. Several pints of serous fluid were found in the plural cavities, and about three gills in the pericardium. Nothing unusual was noticed in the right side of the heart, but in the left ventricle a yellowish irregular mass was found which extended through the ventriculo-aortal opening, reaching two or three inches into the artery, and terminating in filaments, as if the propulsion of the blood had whipped the "*polypus*" into shreds.

Being in doubt about the existence of real polypoid growths in the heart, we removed the parts which were apparently morbid, that they might be carefuly examined at leisure. The subsequent examination showed that the substance referred to was a real fibrous growth, having its origin in the walls of the ventricle and septum ventriculi. The fibres of the polypus were traced by dissection into the muscular tissues beneath the endocardium. The morbid mass must have seriously interfered with the functions of the semilunar valves at the mouth of the aorta, allowing considerable reflux of blood.

I had several times previously seen fibrinous coagula in the heart which resembled polypi, but in no other instance have I found a real one. Polypous concretions in the heart so frequently spoken of as polypi are probably not formed after death, but *in articulo mortis.* Dr. Baillie in his work on Morbid Anatomy, speaks of them as having formed after death, by coagulation. Dr. Howship remarks in his work on Surgical Disease, that these fibrinous clots often form some time before death, and cites cases where the semi-lunar valves had evidently made progressive impression upon the concrete mass. This he considers demonstrative proof that the polypous substance was not only formed during life, but was increased by the progressive deposit of fibrine upon its surface. Mr. Stewart of Edinburgh, in one case found fibrinous concretions, or polypi, in the heart,which were highly vascular, and"which therefore," he adds, "must have existed a considerable time previous to death." In another case, "an abscess was seen distinctly formed in the centre of the polypus."

All of the above seem to corroborate the views of Dr. Young, and assist in establishing as a fact, the idea that not only polypous concretions, but real polypi, vascular, and liable to abscess, may have an existence within the heart. How long they may exist before destroying life it is not easy to say. The probability is, however, their presence could not be endured any great length of time without exciting disturbance enough to prove fatal. It may be presumed that polypus could exist for weeks and months without destroying life, but after an abscess had formed in the growth, or pus had been produced about it, the termination of life must he somewhat speedy. It is not likely that what is called polypus of the heart could be twenty years in the process of development.—H.

SPERMATORRHŒA.—ITS TREATMENT.

BY A. B. JACKSON, M. D.

If any be so inexperienced in the management of spermatorrhœa as to expect there is a "specific" which will promptly and certainly remove every form of the disease, they are destined to meet with disappointment. We see specious advertisements of various "cordials" and "elixirs" for the cure of "seminal incontinence," "impotence," &c., &c.; but upon trial none are found to possess the wondrous efficacy claimed for them. This is as might be expected by one at all acquainted with the pathology of the different forms of the affection. A remedy which is efficacious in restraining the frequency of the emissions in a simple case, would be contra-indicated when a state of impotency had been reached. In one instance a sedative may be required; in anotber a stimulant or tonic; and in others no medication would be of any service. It was in consideration of the prevalence of erronious views upon the pathology and treatment of spermatorrhœa, that I was induced to contribute an article upon this subject. By this contribution I had in mind, too, the design of wresting from the hands of the unprincipled, a class of business that belongs as legitimately to the ordinary practitioner as that of obstetrics. If a physician has a distaste for the one kind of practice, he would probably not enjoy the other.

But to the treatment of the disease in question;—A young man solicits relief for what he suspects, from reading the newspapers, a seminal weakness. He says he has an emission once in a week or two, the discharge occurring during the progress of a lascivious dream. I advise all such patients to go about their business, and let alone the papers containing notices of sexual diseases. I reveal to them the nature of their supposed difficulty, asking them to use a little common sense in the matter.

To patients suffering from emissions almost every night and sometimes two or three times a night, but always with erections and erotic sensations, the difficulty seeming to arise from undue excitement of the organs, I prescribe lupuline in doses of thirty grains each, to be taken every night before retiring to bed. I exhort them to abstain from a too stimulating diet; irregular hours in eating and drinking, especially in the evening; from reading books calculated to arouse the passions; from indulging in thoughts and practices that tend to sensual emotions; and from cold water bathing just before going to bed. The practice of using the cold douche in the treatment of nocturnal emissions has become quite common on account of its recommendation by the advocates of hydropathy. The people of this country, for the past few years, have been betrayed into the mistaken idea that water as a remedial agent, could do no harm. Let the inquiry be made in regard to the immediate and ultimate effect of the cold bath taken just before retiring to bed. At first the system suffers from a shock, during which the blood is driven inwards and a feeling of chilliness comes on. The patient then uses a crash towel, applying it energetically to bring on reaction which he may or may not succeed in accomplishing; he next covers himself snugly in bed, and, as the lulling influence of warmth and full reaction come on, he drops asleep. A person with impressible nerves and a seminal weakness, could not fail to have the mischievous dream called forth under such influences. A cold bath, to accomplish what is claimed for it, which is the production of a tonic effect upon the constitution, should be taken in the middle of the forenoon, and then it should be used hurriedly in neither a warm nor cold room. The too frequent application of water to the body has a depressing effect.

If the lupuline does not have the desired effect after it has been taken a few weeks, camphor in six or eight grain doses may be tried. A good form to exhibit camphor medicinally is, to rub it into an emulsion with water, loaf sugar, and gum Arabic.

I have used camphor many times when lupuline failed to produce the desired effect. In a few instances it proved efficacious when the other remedy failed. I have known it to aggravate the disease. On the whole I do not think it so reliable in a majority of cases as lupuline. When camphor has been swallowed a few minutes, it excites mental exhiliration, seeming to possess stimulating properties; afterwards its influence is that of a sedative, especially upon the genital organs. Therefore if the medicine do no mischief during its stimulating stage, its action is likely to prove beneficial.

The bromide of potassium has been highly extolled as an anaphrodisiac, but I have not been fully satisfied that it possesses any such property. My experience with it, however, has not been great.

When these remedies do no good, it will be well to make a more thorough inquiry into the cause of the disease. It may happen that ascarides in the rectum are the exciting cause of the genital irritability and seminal loss. If so, vermifuges are to be administered until the parasites are thoroughly expelled. If the involuntary spermatic loss be occasioned by herpes on the glands penis, that affection must be cured. An enlarged or extravagantly developed prepuce, should be excised; a phymosis relieved; and all states not indicative and productive of a sedative condition should be corrected. An elastic bougie should be passed to ascertain if any stricture of the urethra exist, or preternatural irritability. Either of these states may be cured by repeated introductions of the instrument used in making out the diagnosis. Not uncommonly such an irritable condition of the urethra and genital apparatus follows an attack of gonorrhœa that the utmost ingenuity and skill will be required to overcome it and the seminal flow depending thereon. In many such cases the disease is owing to debility of the parts, and must be treated accordingly. Urethral injections of tonic fluids may effect much, yet the daily introduction of a bougie smeared with a tonic lubricant is generally more effectual. I have used the following compound to lubricate the bougie:

℞. Glycerine, f℥j.
Hydrocyanic acid, gtts xxx.
Morphia, grs. iv. M.

The bougie should be carried quite to the neck of the bladder, and left there for four or five minutes each time. Internally such agents should be taken as shall establish a healthy action of the stomach and bowels. As these organs may be in the worst state of derangement, many remedies may be needed to produce a complete cure.

The most perplexing and obstinate cases of spermatorrhœa are those in which the disease has extended so far as to produce impotency. An individual's mind suffering with this condition of the disease, is commonly so depressed that the most persevering efforts will be required to drive away despair. Such a state not unfrequently occurs among the married, and then the worst of consequences are to be apprehended. Suits for divorce and domestic infelicity are among the difficulties attending such unfortunate cases.

In some instances involuntary nocturnal emissions are cured by matrimony, but if the remedy fails it will soon turn out to be worse than the disease. Why physicians so improvidently recommend marriage for the cure of seminal weakness I could never understand, unless it be that they are unacquainted with the disastrous results which so frequently attend their advice. Many men suffering with involuntary emissions before marriage, having entered that state find themselves unable to consummate the sexual act either from premature emissions, or from a lack of erectile power. Such persons, failing a few times, lose confidence in themselves and rapidly sink into a state far more hopeless than that endured while single. The married state is not likely to improve the worst cases, and often proves detrimental to the bad. If a suffering party contemplate matrimony and nothing but the weakness prevents, the intended alliance may be encouraged, for a state of continence and anxiety frequently turns out injuriously.

But to the treatment of those cases of impotency in which the mouths of the ejaculatory ducts are patulous from want of contractile power in the little sphincter muscles which surround and control these outlets. We are directed by Lallemand to cauterize the urethral extremities of those canals. And many practitioners blindly follow that celebrated man, not even stopping to inquire what the cauterization is expected to do. Not long since I became acquainted with a case in which what is called a "spermatorrhœa ring" was advised as a remedy. The patient was completely impotent, the seminal loss taking place without erection. In such a case the above named instrument could do no possible good, as it is adapted only to those cases in which perfect erection precedes the emission.

In a bad case of impotency, the urethra being strictured, and the parts behind the stricture paralyzed, many means must be attempted before it is pronounced incurable. Among other things the general health must be attended to. Indigestion, constipation, and many other morbid conditions are likely to exist and must be removed. Iron, strychnia, and cantharides are often serviceable. Phosphorus and musk have been recommended to arouse to action the nerves distributed to the genitals. The oils of cloves and nutmeg have been used for the same purpose, but not much benefit and often injury arise from such agents. The action of an exhausting syringe upon a cup or tube placed over the penis will produce an artificial erection by the blood passing into the organ lying in a vacuum. Such a process was used with success upon one of the royal family of France some years ago, and the impotency of the prince was overcome. The artificial distention of the organ so stimulates the debilitated nerves that a natural erection may follow.

A current of electro-galvanism daily sent through the organs of the pelvis not unfrequently calls activity into the debilitated organs. This agency is not to be relied on in all cases, but it frequently proves a happy adjuvant. Not to be neglected is the bougie, smeared with a properly medicated lubricant. A bougie of good size should be smeared with glycerine in an ounce of which are dissolved ten grains of strychnia, and passed quite to the bladder. The instrument dilates the stricture and gives tone to the parts beyond. The strychnia causes the paralyzed muscular fibres of the sphincters of the ejaculatory ducts to contract sufficiently to prevent the constant escape of any seminal fluid that may collect in those tubes. And it may then flow back into the visiculæ seminales, where it for the time belongs. The bougie should be passed every six hours until relief is obtained.

I have known benefit to follow compression upon the perineum in cases like those just considered. This may be applied in several ways. I will describe one or two. Take a belt to surround the body; to this before and behind are buttoned the ends of two elastic perineal bands which diverge sufficiently in front to pass each side of the genitals, and behind enough to lie on each side and at some distance from the anus. In the middle a pad, the size and shape of a hen's egg, is placed, which by the elasticity of the straps is made to press pretty firmly upon the prostate and the debilitated portion of the urethra. The pressure forces the blood along in the plexuses of veins in that region, the entire parts obtaining relief and tone by the process. It keeps the seminal fluid in its reservoirs, which thus become accustomed to its presence, enabling them to retain it longer. The pressure of the perineal cushion favors health, and priapism, and obviates premature discharges in attempts at coition.

The apparatus recommended above, is made like the "London belt," which is used by some ladies to prevent falling of the womb. Instead of this, pressure may be produced upon the perineum by means of a cushion, straps of webbing over the shoulders holding it in place.

Irritants and setons have been used about the perineum to overcome spermatorrhœa and impotence, but without much benefit. The repeated application of strychnine ointment to the perineal region has accomplished more than vesicants.

M. Lallemand, as previously stated, often cauterizes the mouths of the ejaculatory ducts. His instrument consists of a silver canula, shaped like a common catheter, and a piston-like rod which slides inside of the canula. The latter has an opening or fenestra near the end like the eye of a catheter, yet it is in the under side. The piston has a cavity near its inner extremity, in which the solid nitrate of silver is held while being pushed forward and rotated opposite the fenestra in the canula.

This instrument has been abused more than almost any other. The use of it became a hobby as soon as it was announced that cures had followed caustic applications. No discretion was manifested in the selection of cases to which it seemed adapted, and the most ignorant pretenders sported it as though it were a toy. Undoubtedly much mischief has been thus done, yet from the private nature of the cases, comparatively few have come to light. Occasionally the caustic would fall out of the cavity in which it is designed to be held, causing a severe lesion of the urethra, prostate, or other part with which it happened to come in contact.

In place of the port-caustic of Lallemand, I have used a cheaper, and in my opinion safer and more efficient instrument in those cases where there were evidently great relaxation and ulceration about the veru montanum and mouths of the ejaculatory ducts. The instrument referred to may be prepared as follows: Take a good sized elastic bougie and with a sharp knife cut an eye or fenestra near the extremity which enters the urethra. A mark of some kind may be placed upon the opposite side of the bougie, at the outer end, that the direction of the fenestra may be determined after the instrument is introduced. If any hollow space exist in the bougie beyond the fenestra, it should be filled by some non-absorbent material. Into the elastic tube is to be carried a stiff wire, whalebone, or wooden piston, upon the end of which is secured a piece of sponge. The sponge may be carried forward through the bougie, into the fenestra, and there wetted with the muriated tincture of iron, then withdrawn a short distance to prevent the contents of the sponge from touching the walls of the urethra until the desired point is reached. With the piston the sponge is to be carried forward into the fenestra which lies over the openings of the ejaculatory ducts, and pressed against the filling beyond, sufficiently to unload it of a quantity of the ferruginous mixture. It may then be drawn back into the tube, and the whole taken from the urethra.

A powerful tonic and astringent thus applied closes the patulous prostatic ducts and checks the ulceration if any exist. A few applications commonly serve to arrest the disease. Other tonics, astringents, and caustics may be applied in the same manner. A silver instrument fashioned somewhat like Lallemand's, may be used instead of the elastic one above described.

An ointment or pommade containing such agents as may seem to be indicated can be applied to the membranous and prostatic portion of the urethra by means of either of the previously mentioned instruments.

It may be borne in mind by those inexperienced in such matters, that the first few applications are apt to increase the irritability, but this soon passes away.

By following the treatment indicated in this article for the various forms of spermatorrhœa, I am satisfied my readers can cure almost every case that may be presented for advice. It must be borne in mind, however, that the liability to a return of the disease is very great, and such a result is to be guarded against by persevering efforts. To allow a case to fully relapse after a complete cure, argues negligence or ignorance of the nature of the malady.

FRACTURES IN THE VICINITY OF THE SHOULDER JOINT.

BY PROF. A. J. HOWE.

Cases of every day occurrence, and especially those injuries which are likely to be followed by permanent deformity, ought to be considered with more than ordinary attention. The responsibility of such cases led Dupuytren to remark that the management of fractured injuries should not be undertaken by those who have been careless about such matters, lest they make cripples of their patients and expose for target practice their own reputation.

All solutions of continuity of bones in the vicinity of joints, give rise to numerous errors of diagnosis; and the observation applies with peculiar force to the injuries which occur in close proximity to the scapulo-humeral articulation. Every experienced surgeon can call to mind cases of injuries of the shoulder, in which he has found the utmost difficulty in arriving at a satisfactory conclusion as to the nature of the accident. The mental inquiry arises,—which of the several injuries that may happen to the shoulder, is the one then to be treated. The scapula is so arranged upon a convex portion of the thorax, being unrestrained in movement, as almost to defy fracture. Scarcely any bone in the body has such freedom of motion. Suspended and enveloped in muscles, it yields to or decomposes any force that may be directed against it.

Among the more common of the bony lesions that occur at the shoulder, are, fracture of the anatomical neck of the humerus or separation of the epiphysis from the shaft; fracture of the greater tuberosity of the bone; fracture of the acromial extremity of the clavicle; and fractures of the acromion and coracoid processes, and the neck of the scapula.

To describe all these lesions and the manner of dressing them will require much space, therefore I will condense as much as is practicable. Fracture of the humerus through the anatomical neck, is an accident which not unfrequently occurs in early life. The injury is commonly attended by so striking a deformity, that there is no great difficulty in recognizing it. The lower or long fragment is drawn inwards by the pictoralis major and latissimus dorsi muscles; the broken end of the bone almost clear of the other or short fragment, rests under the coracoid process and causes a striking and abrupt projection. The general appearance of the shoulder is as if a dislocation of the head of the bone had taken place inwards; and the forces which produce the deformity are the same as those which retain out of place the luxated humerus. If the fingers are pressed beneath the acromion process, the vacuity is not so great as after dislocation, and the superior fragment can be felt resting against the glenoid cavity. No crepitation can be discovered by movements of the arm, unless during extension and counter-extension, the upper end of the lower fragment be pressed outwards as the elbow is carried inwards. This process overcomes all deformity, and, the two fragments lying in contact, any rotation or other motion given to the one, unless participated in by the other, would elicit crepitus. Unfortunately, as a means of diagnosis, the upper fragment will, when displacement is overcome, participate in every motion given, the lower, so that no grating or rubbing of the one piece of bone upon the other can be produced. But the nature of the injury can be ascertained by abandoning the parts to the uncontrolled action of the muscles, when the deformity will readily recur. It is to be borne in mind that after a dislocated humerus is adjusted, it is not likely to be displaced by any ordinary movement, hence the distinction between the two injuries becomes apparent.

If the fracture be through the anatomical neck of the bone, the displacement will be nearly as great as in dislocation. In young subjects however the separation usually takes place between the epiphysis and the shaft, the upper fragment retaining the two tuberosities, and consequently, the attachments of the spinati and subscapularis muscles. A fracture at this point is more likely to result in bony union than a lesion through the anatomical neck proper. Besides fractures through the points just mentioned, another occasionally occurs in which the greater tuberosity is separated from the remainder of the bone. A striking feature of this injury is a remarkable increase in the breadth of the shoulder-joint. The deltoid muscle is somewhat flattened, but the fingers cannot be made to sink into the glenoid cavity as after a dislocation of the head of the humerus. The elbow projects somewhat from the body, the hand of the sound side being raised to support it and the lower part of the arm. The acromion process appears unusually prominent, though not so much so as after a dislocation, or separation of the head from the shaft of the bone. Two tumors are distinctly seen and felt at the articulation; the inner and larger being formed by the head of the humerus, and the smaller by the disengaged tubercle, a deep and well marked sulcus, following the direction of the bicipital groove, being between them. If the thumb or forefinger of the left hand be placed upon the internal protuberance of bone, whilst the elbow is rotated by the right, the protuberance will be found to obey the motions of the elbow. If now the thumb or forefinger be placed upon the outer prominence, and the arm be rotated as before, the shaft will be found to move independently of the protuberance; and if the outer tumor be pressed towards the inner, while the before mentioned rotation is going on, more or less crepitus may be elicited. These are the prominent features of fracture of the greater tuberosity of the humerus, and I have been induced to detail them on account of the difficulty such an injury is likely to constitute for those who, from inexperience in such matters, might be looking for a dislocation, or fracture through the neck of the bone. The lesion is produced by a fall upon the point of the shoulder, the violence putting the teres minor and spinati muscles suddenly upon the stretch.

In the treatment of this fracture, some difficulty will be experienced in keeping the fragments in contact. The patient will not endure much pressure upon the outer tumor, and it will require a great amount to keep it in place. A compress may be laid upon the outer protuberance; over this the turns of a figure of 8—bandage, (which consists in passing a roller from the point of injury around the chest and opposite shoulder anteriorly or posteriorly, and over and around the injured shoulder) are to rest. The arm is afterwards to be slung to the side, with the open hand resting upon the opposite breast. This dressing applied so it will stay in place without producing inconvenience, may secure bony union without deformity. If the scapula and arm be not kept steady during the healing process, a fibrous union only will result.

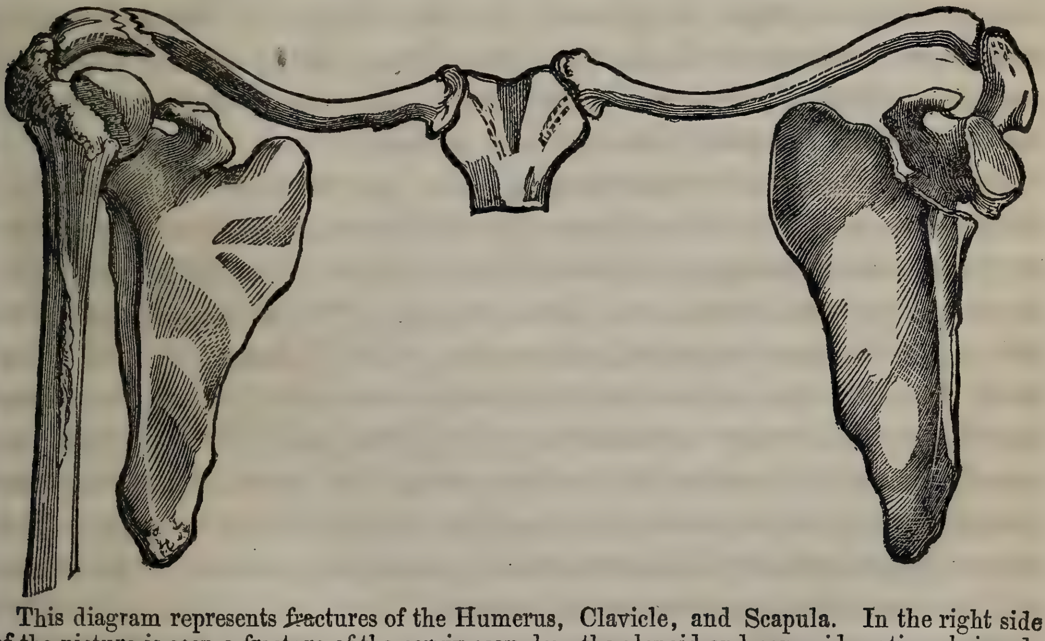
Fracture of the Acromial Extremity of the Clavicle.—Of this fracture little need be said, as it is of rare occurrence, and seldom followed by any deformity. The lesion may take place at almost any point between the coraco-clavicular ligament and the acromial articulation; and even through the clavicle where the coraco-clavicular ligament is inserted into that bone, or just outside of it. The deformity is not great, the external fragment being maintained in its position by its articulation with the acromion, and the internal by its connection to the caracoid process. The latter fragment is sustained in position in part by the coraco-clavicular and trapezoid ligaments, while the trapezius muscle above, and the deltoid below, oppose displacement by neutralizing the action of each other. If the surgeon, however, pass his finger along the line of the bone, making pressure upon each portion of it in succession, he will find that the patient will wince the moment he presses upon the spot where the bone has been broken. Let him next grasp the clavicle upon either side of this painful spot, and endeavor to move the two portions of the bones in opposite directions, and he will during that manœuvre, become sensible of a grating of the fragments upon each other. In some cases the displacement is considerable, either the fragments overlap each other, or they form a sharp angle at the line of separation. The dressing for this injury will be described hereafter.

Fracture of the Coracoid Process.—This is an injury that seldom occurs. I have seen but one case. In that the accident happened in the following manner: An Irish woman seized her child by the shoulder, and gave a sudden jerk upwards, her hand fixing for the time the scapula and the humerus. An audible snap followed, the child at the same instant, screaming with pain. Upon examining the shoulder, I could not discover any displacement, but judged from the distress of the child there had been a severe injury done. After waiting some time for the little patient to get over its sobbing, I made a more careful inquiry into the nature of the injury. The symptoms were: incapability of voluntary motion; swelling; ecchymosis; and pain, increased by pressure, or the slightest motion. By manipulation the coracoid process was found to be depressed and movable, but not disengaged from the scapula. The greatest relief was obtained by bringing the arm up across the chest and supporting the elbow. A handkerchief sling was the dressing used. The object of the dressing was to support and steady the arm, as well as to relax the muscles inserted into the process. A firm union was affected in two weeks.

Fracture of the Acromion Process.—When a person receives a fall upon the point of the shoulder, the acromion striking against some hard substance, a fracture of this process of bone is somewhat likely to occur.

Many specimens are preserved to show the point of separation, yet most of them appear to be failures of ossific union at the point where the epiphysis joins the body of the bone. It is not to be supposed, however, that all lesions of this character are merely separations of the epiphysis, for there are well authenticated cases of fracture of the acromion at a point not corresponding with the junction of the epiphysis. There is some danger of mistaking this injury for a dislocation, but a little care in the examination will disclose the true nature of the case. The symptoms are: pain; inability to move the arm, the member hanging powerless by the side; loss of the natural contour of the shoulder; and more or less swelling and ecchymosis. If the arm be grasped and forced up and down at the same time the scapula is steadied with the other hand, crepitation may be observed. This, when it can be elicited is a positive diagnostic symptom.

In regard to the union following such a fracture, the general impression among surgeons is, that it will be fibrous. Bony union in cases of this kind has taken place and consequently, will again. Since pseudarthrosis has been known to depend much upon the mobility permitted by the dressing, fewer instances of false-joints are reported. In case of broken acromion the head of the humerus should be held up beneath the fragment to give it support. This can be accomplished by slinging the arm to the thorax, the sling well supporting the elbow. To secure greater quietude to the shoulder, the arm should be bandaged to the body.



This diagram represents fractures of the Humerus, Clavicle, and Scapula. In the right side of the picture is seen a fracture of the cervix scapulæ; the glenoid and coracoid portions being detached from the rest of the bone, but not displaced. In the left side of the picture are seen fractures of the acromial extremity of the clavicle, and of the anatomical neck of the humerus.

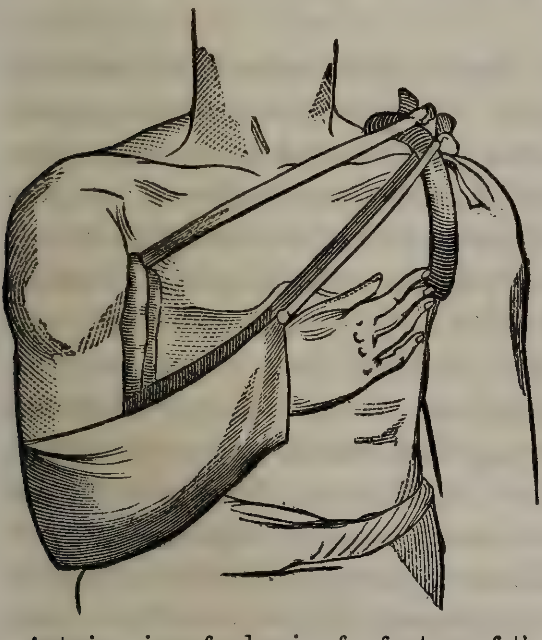
Fracture of the Neck of the Scapula.—Among the most perplexing fractures for the junior practitioner to recognize, is that of the neck of the scapula. It so nearly resembles a dislocation of the head of the humerus into the axillary space, that even the most experienced surgeon might be deceived in his first impressions. Manipulation will reveal the true state of the case, which may be conducted in the following manner: Take hold of the acromion process, pressing the fingers beneath it to ascertain if any thing occupies the glenoid cavity and the space usually filled by the head of the humerus; next feel for the coracoid process, and conclude from a knowledge of the parts and by comparing the two shoulders whether the two processes (the acromion and the coracoid) maintain their relative positions;—it is to be borne in mind that after dislocation they do sustain their normal relative positions, but after a fracture of the neck of the scapula the coracoid process is drawn inwards, keeping internal to the head of the humerus,—beneath the clavicle in the axillary space a hard round tumor will be felt after a fracture or dislocation,—this is the head of the humerus, and to bring it to place in either injury requires some force. If nothing contra-indicates, an anæsthetic should be administered before attempts at reduction are commenced. Then the surgeon's fist or knee for a fulcrum, may be pressed into the space between the head of the humerus and the ribs, while as a lever, the arm of the affected side, is carried inwards across the point of the thorax until the displacement is overcome. Should the injury be a dislocation, the head of the humerus returns with a snap, *and remains in place;* on the contrary, if the injury be a fracture of the neck of the scapula, crepitation can be elicited when the parts are adjusted and rotated; and *the displacement will readily recur as soon as the parts are left to themselves.*

Fracture of the neck of the scapula does not often occur, on account of the great mobility of that bone. In the museum of Baron Dupuytren in Paris, which comprises almost every variety of morbid anatomy, there are but two specimens of the injury. Sir. A. Cooper, refers to two cases he was consulted concerning. In Philadelphia and New York there are two or three morbid specimens showing this injury. One case came under my observation four years ago. The fracture, as usual, extended through the narrow part of the bone, separating the glenoid cavity and coracoid process from the rest of the scapula. The broken line commonly falls into the supra-scapular notch. The *blade* and the acromion process continue united.

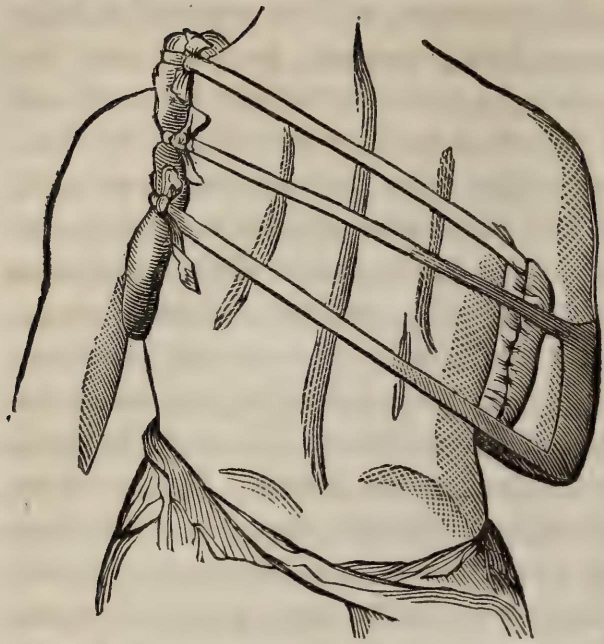
Dressing for Fractures of the Upper Extremity of the Humerus, Clavicle, and Neck of the Scapula.—After either of the fractures just mentioned is adjusted, some simple apparatus will be required to keep the parts in place until they have firmly united. In each case the shoulder or neck of the humerus is to be carried outwards, upwards and backwards. To accomplish all this it is well, as was shown by Ambrose Parè and Desault, to use a cushion for a fulcrum, in the arm-pit, and the arm as a lever. Desault used "a cushion made of hair or flocks, five or six inches long, and three inches and a quarter thick at its base. To the corners of its base, placed upwards, are fastened two strings, which being passed across the back and breast, are to be tied to the opposite shoulder. The cushion being thus placed, the surgeon seizes the patient's elbow, the fore-arm being bent, and brings it forward, upward, and inward, pressing it with force against the breast. By this manœuvre the humerus carries the shoulder outward; the ends of the fractured portions are placed opposite one another, and the deformity disappears. All that is then necessary is to fix the arm in that situation and prevent it from moving all the time that nature requires for the consolidation of the fracture."

This part of the dressing recommended by Desault is very well, but instead of using his three bandages, each eight or nine yards long, to envelope the chest and arm, I prefer more simple and comfortable means, which will carry out the same indications,

Dr. Fox, of Philadelphia, has modified the dressing of Parè and Desault, for fracture of the clavicle, and which is useful in treating the other varieties of fracture just referred to, by using a little shorter cushion for the axilla that the arm may become a better lever, and a padded ring or collar for the opposite shoulder. He also uses a sling which is like a coat sleeve ripped open in front, and having strings or tapes at its extremities to tie to the ring. The cushion or pad is wedge-shaped, and stuffed with cotton or bran. The ring may be made by sewing together the ends of a rope which is long enough to easily encircle the arm at the shoulder; over the rope a loose calico cover is stitched, between which and the rope the soft cushioning is stuffed. After the



Anterior view of a dressing for fractures of the clavicle, anatomical neck of humerus, and cervix scapulæ.



Posterior View of the dressing described in the text.

dressings are prepared, the ring is put upon the sound shoulder; the pad is then placed in the axilla of the injured side, the deformities having been overcome as much as possible by manipulation; the elbow is brought to the side, and the sleeve-like-sling applied, the hand being tied high upon the thorax. This dressing will answer every purpose. Others have been devised, but they have more objections than the one described. It is the most desirable dressing for fracture of the clavicle at any point, therefore it should be kept ready for use by every physician who pretends to treat fractures. The dressing is to be worn continually for about four weeks, when a firm union will have occurred in all ordinary cases.

The fractures thus far referred to, have been represented as uncomplicated with any other fracture or injury. The practitioner must consider, however, that very often several lesions are produced at the same time, rendering the diagnosis obscure, and the treatment difficult. A gunshot injury might leave a compound, comminuted, and complicated fracture. To manage such cases successfully, requires judgment, ripened by experience. Frequently in such cases, no kind of a methodical dressing can be endured. A folded towel placed in the axilla, and a handkerchief under the elbow and arm, the ends of which being tied around the neck, constitute a simple dressing, that can sometimes be borne when a more rigid one is intolerable. A fracture of the neck of the humerus sometimes occurs, which is analogous to an impacted fracture of the cervix femoris. In such a fracture the upper fragment may be driven into the cancellated structure between the tuberosities of the lower, or the lower is forced into the reticular tissue of the head of the bone. Impacted in whatever manner, the injury is difficult to diagnose, and the injury is seldom understood until the parts are dissected. The lesion may be intra- or extra-capsular, or partial to each. Cases of fracture through the anatomical neck of the humerus have been reported, in which the fragments failed to unite with osseous material. The failures probably arose from want of vascular supplies in the upper fragment.

EDITORIAL DEPARTMENT.

CLOSE OF THE WINTER SESSION.

The Lectures of the Winter Session of the ECLECTIC COLLEGE OF MEDICINE, closed January 27th; and the Commencement exercises were held in Melodeon Hall on the evening of that day. The occasion presented about the same features of interest which have characterized previous exercises of the kind.

A report of the condition of the college, presented by the Dean, indicated a degree of success unparalleled in the history of any medical institution. Established as it was, under adverse circumstances, the Eclectic College of Medicine has attained in the period of three years, a position which few, even of the favored, have ever reached. Since its Incorporation in 1856, there have been three hundred and eighteen matriculants. Of these, one hundred and three have received the degree of Doctor in Medicine. The Honorary degree has been conferred upon twenty-three gentlemen, who by their position and medical and scientific attainments, have been considered deserving the dignities of the College.

The number of matriculants the first year, was 69; the second, 108; the past, 141. Thus it will be seen that there has been a regular and marked increase from year to year in the size of the classes. These results have more than realized the hopes of the most sanguine. Such progress argues nothing but success for the future, especially when sentiments of encouragement and approval continually come from the great mass of the medical profession.

Philadelphia, from the zeal early manifested there by her eminent medical men, and by the reputation that city has acquired through the publication of medical literature, has enjoyed the name of being the centre of attraction for students of old-school medicine. So Cincinnati, by her influence in disseminating the truths of liberal medicine by the publication of books, pamphlets, and other literature, has become the resort of students of unbiased and progressive sentiments.

Cincinnati is centrally located for the patronage of all the states of the Union, being neither Eastern, Western, Northern, nor Southern; and great thoroughfares render it accessible from every point. The commercial importance of the city secures to it superior Hospital advantages. All these attractions have contributed to keep up a decided increase in our classes during the last two or three years, even while the number of medical students in the United States, from financial and other causes, has actually diminished.

The President, after offering some very appropriate remarks, during which he alluded to the occasion that had drawn the members of the college together from day to day, and to the object of this last meeting of the session,—by authority conferred the degree of Doctor in Medicine upon the following gentlemen:

G. W. Bettes, Ohio.
G. T. Blair, "
N. E. Broombaugh, "
J. J. Byers, Indiana.
J. M. Clark, Vermont.
G. F. Cutler, New York.
B. F. Fallin, Illinois.
W. K. Foltz, Ohio.
C. Gaskins, "
P. S. Greenamyer, Ohio.
A. M. Headley, Louisiana.
A. S. Hetherington, Ohio.
D. C. Linn, Illinois.
O. P. Ma'han, Indiana.
J. E. Mc Guire, Missouri.
P. M. Small, Ohio.
R. M. Smith, "
H. S. Tanner, "
H. D. Thatcher, New York.

During the past year the Honorary degree has been conferred upon:

J. H. Axton, Indiana.
S. F. Balch, Iowa.
H. Bridgeman, New York.
W. S. Bush, Indiana.
W. M. Cooper, Illinois.
J. D. Cope, "
F. M. Ferrell, Alabama.
D. D. Fiske, Massachusetts.
D. Gamble, Pennsylvania.
J. F. Jones, Tennessee.
J. Knox, Nova Scotia.
W. A. Thompson, Ohio.
J. Weston, Vermont.

An address was then delivered to the Graduating Class by Prof. C. H. Cleaveland, which constituted one of the main features of the evening. He alluded to the idea that heretofore they had been studying medicine as a *science.* The instructions they had received during their period of preparatory study were only a means to the accomplishment of an end; henceforth it would be necessary for them to pursue medicine as a *profession.* They had been taught what their instructors believed to be true and useful; but it remained with them to manifest the results of that teaching by practice.

He spoke of many other qualifications necessary for the successful physician besides the acquisition of scientific knowledge, among which was first noticed the choice of a *location.* This was worthy their serious and thoughtful consideration. The selection of a home under any circumstance was a matter of importance, but to a physician, of greater consequence than to men of other callings. A place should be selected in which they might reasonably expect their acquirements and efforts would soon be called into requisition with a prospect of pecuniary reward; as well as one that will furnish mental, moral, social, and religious opportunities for the development of themselves and those dependent upon them. Although a change of location always involves the severance of ties, loss of time, employment, vexatious apprehensions and uncertainties, yet the anticipation of none of these should deter one from leaving a place which, by lack of sufficient acquaintance with it, had been injudiciously selected.

As they would be judged principally by externals and not by what they really are, their *offices* should possess internally and externally such attractions as shall arrest the attention of every passer-by and elicit favorable observation and remark, it being invariably the case that many will express gratuitously, sentiments regarding the newly arrived doctor,—favorable if thought deserving, but condemnatory if condemnation be within the limits of justice.

A physician cannot afford to neglect the external appearance of his office. Internally whatever may be used as articles of furniture or of ornament should exhibit order, neatness, and cleanliness, as these constitute too valuable and inexpensive an attraction to be neglected. "Among other attractions, be sure your office contains your own valuable person at all times when not properly employed elsewhere." The office should be situated in the central part of the town, and as near as possible to the location of other practitioners of the place. A person in search of a physician goes where physicians are located; and if he fails to find the one sought, the new comer is likely to be the next employed.

The office *library* should contain the works of the best modern authors in the various departments of medicine, and should receive accessions as they issue from the press, as well as the regular visits of several medical periodicals. The mind by means of these can be brought in contact with the theories and discoveries of the entire profession; and unless it be daily burnished by the productions of the active thinkers of the world, it will become rusty and blunted.

The truly active and comprehensive intellect will have plenty of time to keep well acquainted with the *general literature* of the day, and the physician will find that such acquirements instead of lessening his professional attainments, will serve as a recreation and at the same time render him a fit companion for those who devote special attention to literature and the fine arts. By being able to converse intelligently with people of all classes and occupations in regard to those matters which are of interest to them, the physician secures their respect, contributes to their entertainment, and perhaps gains an influence over them which will result to his advantage in professional matters. He exhorted them to bear in mind that with the title of doctor there is associated the idea of learning, intelligence, refinement, nobility, and humanity; and should anything be done, or left undone tending to lessen the respect in which the profession is held, a sin is committed against that profession. And although the transgression will injure more or less the whole body, the punishment which in one way or another is sure to come, will fall principally upon the unworthy member.

He cautioned them against meddling with *politics* or taking part in political discussions, saying that their profession was that of medicine, to be an honorable member of which is a higher and nobler calling than that of the politician. It was not necessary to abandon all political opinions. Every active and healthy intellect, surrounded by an atmosphere so charged with the political element as that which pervades the United States, must entertain positive opinions upon this all absorbing topic. "But if you must" said he "descend to accept a seat in Congress, or become President, you should at once resign your noble position as physician, and adopt the ignoble title of 'General' or 'Honorable,' as indicative of the depth to which you have fallen." Prof. C. next referred somewhat at length to the various *religious* sentiments with which physicians are brought in contact; and gave some wholesome advice in regard to the manner this delicate subject should be managed by those who can not agree with all, yet would not offend any, still entertaining decided views of their own.

In regard to *fees*, the following ideas were presented: Do not undervalue your mental and physical efforts: Charge a full price, and insist upon its being paid promptly by all who are able to pay their house rent or grocer's bill. The people for whom the physician labors, are under obligations to him; and it is the duty of every practitioner to demand his earnings. Carelessness in regard to pay has been the great evil under which the profession has labored.

We would have been pleased to present the addresses in full, of the Dean, the President, and of Prof. Cleaveland, but want of space compels us to give only brief abstracts of them. The exercises of the evening were listened to with marked attention, by a large and appreciative audience.

THE CAUSE WE ADVOCATE.

While the ultraists in medicine, like ultraists every where, are angrily discussing questions of a partizan character, and hurling at each other and occasionally at us, epithets that have no other effect than to demonstrate the contumacy and malice of their authors, we purpose a steady course in the advocacy of the cause we have espoused.

If any one is disposed to ask for a definition of the enterprise in which we have associated ourselves as a medical Faculty and as Editors of a Medical Journal, we acknowledge the pertinency of the question. For, although our position has been frequently and clearly defined, we are not surprised that the minds of those who read and hear, but do not actively participate in medical controversies, should be so impressed and misled by the clamorous assertions of radical reformers on the one hand, and the ostentatious assumptions of "regularity" and "legitimacy" by fossiliferous old-school men on the other, as to forget or fail to appreciate the calm and moderate discussion of debatable questions in science and medicine, the determination of which involves more fully the interests of the profession and of humanity, than does the reputation or even the existence of all the zealots in the various parties into which the medical profession is divided.

We deem it proper, therefore, to reiterate from time to time, the principles by which we are governed and the ends we are seeking to attain, or in other words to call attention, modestly though earnestly, to the merits of the cause in which we are engaged. This we propose now to do, and in order that we may be clearly understood, we will designate a few things that we do not desire to accomplish; mention certain objects we are striving to secure as means subservient to the promotion of our cause; and then present the prominent features of that cause, the advancement of which is the real and ultimate object of our solicitude and exertions.

Objects we do not Desire to Accomplish.—1. We do not desire to build up a sect or party in medicine, nor to secure to ourselves a name or appellation by which we may be distinguished in the profession. We use the term eclectic as an appropriate and time honored word, descriptive of the spirit and practice of all liberal, independent, and progressive medical men. While we claim to be truly eclectic, and describe our college by that term, we do not deny that there are very many who differ from us in medical theory and practice, and yet are in spirit and position as truly eclectic as ourselves.

2. We do not desire to aid nor encourage ignorant and self-styled reformers in their anathemas against the medical profession as such; and while we are opposed to many errors and abuses that have crept into, and are still retained by it, and while we repudiate and spurn the assumptions of many who have usurped authority and claim to be leaders, we do not desire to, and will not intentionally, say or do any thing that shall derogate from the true dignity of the medical profession or injure the reputation and usefulness of any honorable practitioner.

3. We do not desire to lower the standard of medical education, by dubbing men with the title of M. D., before they have passed through a thorough curriculum of study and instruction; nor by encouraging them to commence and continue the practice of medicine before they have regularly graduated.

4. We do not desire to close the portals of medical colleges to all but the opulent, by the interposition of exorbitant fees ; believing as we do that industry, energy, and sterling worth are as often found among the indigent, as among the wealthy, and that students with such qualities are needed, and should be permitted to enter the profession without being required to make application as objects of charity.

5. When a young man has succeeded in qualifying himself for medical practice, we do not desire, by absurd and tyrannical ethical rules, to prevent him from bringing his attainments, industry and energy into competition with the pre-existing claims of old practitioners.

Objects we desire for the Promotion of Our Cause.—1. We are striving for the elevated position and extensive circulation of the College Journal, whereby medical practitioners and students, and the community at large may be thoroughly informed concerning the important and interesting truths that are being constantly developed in the medical world, and imbued with the spirit of liberality and of progressive science.

2. We are devoting our time, means, and energies to the establishment of The Eclectic College of Medicine, as an institution easily accessible to all industrious students, and from which we may send forth representatives of our principles, whose learning and practical success shall demonstrate to the people that there is such a thing as real improvement in the science and practice of medicine.

The Prominent Features of Medical Eclecticism as Advocated by our Journal and College.—1. The right of private judgment. Every practitioner should enjoy the right of employing or rejecting therapeutic agents and measures, irrespective of the dicta of pharmaceutic or medical associations, and without being subject to the espionage and surveillance of professional censors.

2. Freedom of speech and of the press. Every medical man should not only be permitted, but encouraged to rigidly scrutinize medical theories and modes of practice, and give free and untrammeled expression of his opinions in regard to the same, without subjecting himself to the "mad-dog cry" of "quack," from his professional cotemporaries.

3. Errors and abuses should be discontinued, and all valuable improvements recognized. We claim that it is now clearly demonstrated

that certain modes of practice, such as exhaustive blood-letting, and the employment of certain agents, as mercury, antimony etc, the effects of which are often highly pernicious and destructive, and always beyond control, ought to be discontinued; because better results are obtained by agents or measures which modern science has placed in our hands and which operate harmlessly, and in accordance with the laws of the vital economy.

BOOK NOTICES.

The American Dispensatory. By John King, M. D., etc. etc. Fifth Edition, Revised and Enlarged from "The American Eclectic Dispensatory." Cincinnati: Moore, Wilstach, Keys and Co., 1859.

The profession has been expecting this great work many months; and the unexpected delay in its publication has enabled the author to devote this additional time to its most thorough revision and improvement; and now it is presented to the profession, greatly modified, and as we think with vast improvement upon former editions.

The first change noticeable, is the omission of nearly one hundred and fifty pages of matter, which in former editions were devoted to Botanical Descriptions of the Natural Orders of Plants. The admirable Botanical works recently published by Prof. Gray, and the one soon to be issued by Prof. Wood, have rendered it unnecessary to devote any part of the dispensatory especially to botany, and hence the propriety of this omission.

The space thus saved has enabled the author to describe many agents not mentioned in former editions. Among the agents now described, and which were excluded before, are carbazotic acid, iron-alum, sub-nitrate of bismuth, callitriche verna, gentiana quinquefolia, ignatius amara, oxides and other preparations of manganese, polygala Nuttallii, tephrosia Virginiana, hypo-sulphite of soda, chloride of gold and soda, salts and oxides of zinc, &c. Some of these are extremely valuable agents but of recent introduction into use by the profession.

Nearly all the history and description of agents mentioned in the old work have been re-written and revised, with important and material additions; while in some instances the whole account of remedies has been entirely re-written, bringing the work up to the present advanced state of information and science. Among the more important of these instances, are the subjects of adeps, agave, alcohol, hydro-chlorate of ammonia, aqua, assafœtida, camphor, caoutchouc, cera, cerevisiæ, chloroform, cinchonia, coffee, copaiba, creosote, digitalis, gamboge, glycerine, gutta percha, isinglass, iodine, manganese, preparations of potassa, starch, tobacco, oils, volatile oils, cod-liver oil, ovum, opium, petroleum, phosphorus, quinia, rhubarb, saccharum, sapo, ergot, sulphur, wines, etc, etc.

In the department of Pharmacy, there have been many changes, both by the addition of numerous valuable agents and practical matter, and particularly in selecting what the author considered the *best formulæ* for the preparation of compounds, so that those in the present work do not always accord with those formerly given. In his chemical articles, the author has availed himself of ideas from Wittstein's Pharmaceutical Chemistry, a very valuable and useful volume, scarcely known to the pharmaceutists of this country. The Hypophosphites and their syrups, preparations of recent introduction, but which are attracting considerable attention, have not been overlooked. In fact, the pharmacy of the present volume is so complete as to render it of special value to those engaged in the manufacture or compounding of medicine.

The mode of preparing baptisin, caulophyllin, cimicifugin, dioscoreine, leptandrin, podophyllin, iridin, sanguinarine, scutellarine, pteleine, etc., etc. is given, with sufficient minuteness and perspicuity.

In an Appendix under the head of "Obsolescent and Objectionable Medicines," all the mineral agents are treated of, and their character and mode of preparation explained with sufficient minuteness to enable any one to recognize them, and their action; together with the various modes known for detecting arsenic, and corrosive sublimate. About fifty pages are occupied with this Appendix.

In the present work, although there has been omitted what covered one hundred and forty-two pages of botanical matter, there has been new material added not only enough to fill those pages but still more, in all amounting to about three hundred and seventy-five pages of new matter, swelling the book to fourteen hundred and seventy-five pages, and these pages considerably larger than those of the former work.

In mechanical execution, paper, type and style of binding, the book is superior to former ones, and yet it is sold at the original price of *Six Dollars.*.

The Medical Application of Electricity. By Walter F. Canning, M. D. Fifth and Enlarged Edition, Boston: Thomas Hall, 1859.

The first edition of this work was published ten years since and contained extracts from many works and medical Journals, embracing most of the miscellaneous knowledge then extant, in regard to the use of Electricity and its kindred agents in the practice of medicine.

In the same year Golding Bird published his Lectures delivered before the Royal College of Physicians in 1857, and reported in the London Medical Gazette. In 1850, Dr. R. M. Lawrence of London published a translation of Dr. Froriep's work on *Electro-Galvanism* in *Rheumatic and Parylitic Affections;* and in 1853 he published a little work on the *Application and Effect of Electricity and Galvanism in the Treatment of Cancerous, Nervous, Rheumatic and other Affections.* In 1853, Prof. Cleaveland published a work on *Galvanism: Its Application as a Remedial agent.*

These works contained some new ideas, and Dr. Channing has added a supplementary chapter of about forty pages, to his former work, making the new edition a proper work to accompany the instruments and apparatus manufactured by Mr. Thomas Hall of Boston, the intelligent successor of Daniel Davis, Jr., who in 1836 commenced the manufacture of the first magnetic and galvanic instruments made in America.

Galvanism is recognized as a legitimate remedial agent by all modern teachers and writers on therapeutics; and those books which give reliable information in regard to its use and mode of application, will always be received with favor by the profession.

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Consumption, and its Spontaneous Cure. By Moses Brown, M. D., Newburyport, 1859.

A small pamphlet, with the above title, has been sent us by the author. It was evidently written for public perusal, and mainly for the purpose of imparting hope to those who have an affection of the lungs.

Often such are told by their friends, and by those physicians who know but little of the pathology of the lungs, that their disease is necessarily fatal,—and, losing all hope, despondency aids to produce a fatal termination of the malady. To counteract this, the pamphlet seems well adapted. The author proposes soon to publish a full work on Consumption.

◆

The New American Encyclopædia. A popular Dictionary of General Knowledge. Edited by George Ripely and Charles A. Dana, New York: D. Appelton & Co., Vol. I. A—Aragua. Vol. II. Araktsheff—Beale. Vol. III. Beam—Browning. Vol. IV. Brownson—Chartres.

Four Volumes of this great work, each containing between 750 and 800 double column large Octavo pages are published. They have arrived too late to allow more than a brief exposition of the design of the work to be given in the present No. of the College Journal. Hereafter we shall refer to such articles as are of special interest to our readers.

The editors propose through this work, to present a condensed exposition of the present condition of human knowledge. Such matters as are still controverted will not be discussed. To insure as complete and impartial articles as possible on all subjects, men of eminent accomplishments in their respective departments have been engaged as contributors. In the preparation of the First Volume nearly an hundred writers took part, and in the preparation of subsequent ones, the number will probably not be less. The number of volumes to complete the entire work is not definitely known, but twenty may be required.

Contributions to Operative Surgery and Surgical Pathology. Part II. By Prof. J. M. CARNOCHAN, M. D., Surgeon-in-chief to the State Emigrant's Hospital, N. Y., etc., etc., Philadelphia, Lindsay & Blakiston, 1858.

THE contents of *part second*, of the series to which this belongs, are: Case of exsection of the entire ulna: Remarks on neuralgia of the face, with a case: Exsection of the trunk of the second branch of the fifth pair of nerves, beyond the ganglion of Meckel, for severe neuralgia of the face; with three cases.

To the practical Surgeon these contributions of Prof. Carnochan are exceedingly interesting and instructive. His case of exsection of the entire ulna demonstrates no new principle in surgical science, but gives striking evidence of the extent to which this variety of operations may be successfully carried. That the entire ulna could be removed without more seriously impairing the functions of the arm than has been shown in this case, is quite remarkable. Carnochan's operations for the cure of severe facial neuralgia by exsecting the second or superior maxillary branch of the trigeminus nerve in the floor of the orbit, are as novel as they have proved successful. We have long entertained the idea that the simple division of the ramifications of the second branch of the fifth pair of nerves for the cure of neuralgia, was as unscientific as it has proved futile. The ganglion of Meckel being the source or generator of the morbid nervous sensibility, acting somewhat independently as a nervous centre, must be removed or insulated from the brain, in order to cut off this supply of painful sensations. This subject of exsecting nerves in cases of aggravated neuralgia, is worthy of careful consideration.

Proceedings of the American Pharmaceutical Association at the Seventh Annual Meeting, held in Washington, D. C., September, 1858, With the Constitution and List of Members.

THIS is the most Extensive Report ever issued by the Association, and besides containing the Minutes of the Session, contains also the Reports of Committees, and several able Essays on Pharmaceutical subjects. Not the least important amongst the reports is that of a Syllabus of a course of Study for the student of Pharmacy. If its suggestions are followed by those who are aspirants for the responsible and arduous position of the preparer and dispenser of medicines, it must tend to the elevation of the standard of scientific attainment amongst our untiring co-laborers.

The Reports and Essays are all worthy of an attentive perusal, and will richly repay the purchaser who may avail himself of the condensation of the last meeting of this body as exhibited in this report. Hoping that the future of the Association may be one of vast usefulness, we congratulate them upon this their last and best Annual Report.

The Microscope, Its History, Construction, and Application, being a Familiar Introduction to the use of the Instrument, and the Study of Microscopical Science. By James Hogg, Member of the Royal College of Surgeons, etc. Illustrated with upwards of five hundred engravings Third Edition. London; George Routledge & Co., 1857. Through Robert Clarke & Co., their Agents, Cincinnati O.

The Microscope ; Being a Popular Description of the most Instructive and beautiful Objects for Exhibition. By L. Lane Clark. London ; George Routledge & Co., 1858. Through their Agents, Robert Clarke & Co., Cincinnati, O.

In 1854 the First Edition of Hogg's Microscope was published, and such was its popularity, that in about three years, *ten thousand* copies of it were sold. Through these, it has become so well and favorably known, that we are not called upon to speak of the book further than to say, that the present edition contains much new matter, the addition of a large number of cuts, and changes both of matter and of size, which the author conceives will make it more valuable and convenient as a Manual of Microscopy.

The work of Mr. Clarke, as its title imports, is a clear and comprehensive description of many hundreds of objects from the Vegetable and Animal kingdoms, with directions for the use of the Microscope, and in mounting objects. As a companion to the Microscope, and particularly as a descriptive Catalogue of Slides, it is very satisfactory.

Annual Report of the Board Regents of Smithsonian Institution, showing the Operations, Expenditures, and Condition of the Institution for the year 1857. Washington : Jacob B Steedman, Printer. 1858.

After a careful examination of this volume, we cannot find anything of special value or interest to the Profession of medicine, although there are many things the physician who is also a scientist will wish to peruse and keep for reference. It contains a continuation of Muller's Report of Recent Progress in Physics, which is of deep interest. The Printer has furnished better work than was to be found in former Reports.

PERIODICALS.

The British and Foreign Medico-Chirurgical Review, for January, contains articles of more than usual interest to the profession. It is a feast of intellectual pabulum to the reader.

Ranking's Half-Yearly Abstract, for January, fully equals its predecessors, and higher praise could not well be given.

Braithwaite's Retrospect, has not been received.

The London Lancet comes promptly, and is always welcome, but its long and solid articles are not always read until after some delay.

The New York Medical Press, a Weekly Journal in large Octavo, at Three Dollars a year, is a *live* periodical and we always recieve it with unusual pleasure. It is filled with interesting and valuable matter of special value to those in active practice.

The *Medical Reporter*, another weekly medical periodical we have *heard of*, but suppose it has not come West yet.

The Boston Medical and Surgical Journal, although just entering upon its *sixtieth* volume, is still youthful, sprightly, and full of vigor.

American Stock Journal, a new candidate for public favor, appeals to physicians, as discussing topics of interest connected with physiology and pathology as manifested in the lower animals. It is an able and interesting periodical.

The Semi-Monthly Medical News, a beautiful Magazine, comes to us from Louisville, Ky. The determination of its editors to avoid personalities must give pleasure to all who prefer science and professional advancement to brawls or dog-fights.

EDITORIAL ABSTRACTS.

Bleeding in Pneumonia.—The recent blood-letting controversy in Great Britain, has led to the publication of a Table of Results, from which we abstract a few particulars.

Under the Bleeding plan, with Tartar Emetic:

Chomel	treated,	24	with	13	deaths.
Rasori	"	747	"	164	"
"	"	13	"	7	"
Louis	"	29	"	4	"
Laennec	"	32	"	12	"
Grissolle	"	110	"	28	"

These are not average cases, but among the most fatal reported. When tartar emetic was not used even when the patients were bled, the fatality was less than here given.

Under the Non-Bleeding Plan, and where tartar emetic was given:

Deitl	treated,	106	with	22	deaths.
Grissolle	"	44	"	6	"
Schmidt,	"	87	"	4	"

Of those treated without either bleeding or the use of tartar emetic, but with chloroform:

Mucherer	treated,	90	with	1	deaths.
Helbing	"	65	"	5	"
Varrentrapp	"	23	"	1	"
Stohaml	"	30	"	0	"
Frohmuller	"	12	"	0	"
Hutava	"	12	"	0	"
Theile	"	6	"	0	"
Salawa	"	15	"	0	"

Of those treated without resort to either bleeding, tartar emetic, or chloroform, but with medicines not reported:

In Vienna Hospital were treated 5909, with 1439 deaths.

" 1858,	"	658	"	187	"
Wittich	"	23	"	0	"
Schmidt	"	13	"	6	"
Bennett	"	63	"	3	"
Kissel	"	112	"	5	"
Buxkart	"	60	"	1	"

From the above, the injurious effects of both bleeding and tartar emetic in this disease, can be perceived; but we are by no means sure that the best method of treating it was adopted by any who have favored the profession with reports of the results obtained.

Carbo-Sulphuric Paste. Syphilis.—Ricord has been accustomed to use a paste prepared by taking powdered vegetable charcoal, and making a paste of it by means of sulphuric acid, to be applied to phagedænic chancres. The paste soon dessicates, and dries up the chancre, leaving a black crust closely adherent to the tissues which does not fall off under several days, when it leaves a clean sore, or sometimes even a healed surface.

MISCELLANY.

MASSIE'S SOUTHERN ECLECTIC PRACTICE.

The article on the above named work, which appeared in the January number of this Journal, occupied as much space as we believed ought to be devoted to such a matter, and as editors we should perhaps never have recurred to the subject; but as our Correspondent has sent us another communication, we insert a portion of it out of respect for him, and as a racy morceau which cannot but serve to put the reader into a pleasant humor.

Eds. College Journal:—Will you permit me to correct some *mistakes*, or *misrepresentations*—indeed entire *fabrications*—which I find in the February No. of the "*Cincinnati Eclectic Edinburgh M. Journal.*" Under the caption of "*Dr. Massie's antagonists*," that Journal—whether by its European editor, or its American, is not divulged—has some curious comments.

This "*Edinburgh*" Journal wilfully and knowingly charges the *comments* upon Massie's work to the *editors* of the College Journal, when *he saw* the comments were *quotations*, and were signed "*Illinoisan.*"

The "*Edinburgh*" editor represents *Dr. Massie* to be "a gentleman and a scholar." The *first* he may be: the second he cannot be; or, at least, was not when he wrote his book, and cannot be so regarded without falsifying his record as previously quoted word for word and page after page. In fact I will give the "*Edinburgh*" editor $50, and if he is afraid of my *incog.* I will place the amount in the hands of any honest man whom he may name, to be paid over to him, if successful—*when he proves I have made one single misquotation.* Let him, therefore, do this before he indulges in *his* wholesale and *false* assertion that "we deny the whole."

This "*Edinburgh*" editor says of *Dr. Massie's* book *what Dr. Massie* positively *denies. He* says *Dr. Massie* aimed to give "both sides of the profession." *Massie* says *his book* is *original*, and that *the practice is his practice.*

But this "*Edinburgh*" man finally reveals the head and front of my offending. He says that I tried to make the "*impression* that Dr. M. is filling his position in our school this winter."

Now if *Dr. Massie* is *not*, who is to blame? "*Edinburgh*" or "*Illinoisan?*" *Massie's name* is *now* in the Feb'ry No.—on the circular for the Spring Session as "Prof. of Theory and Practice of Medicine and Pathology." I cannot translate Cincinnati to my residence away off in Ills., as easily as "*Edinburgh*" in Scotland, is translated to Cincinnati. If, therefore, there be a wrong "impression" made, "*Edinburgh*" and not "*Illinoisan*," is responsible for it. If deception be used "*Edinburgh*" is the *deceiver.* But the plain truth of the whole matter is, *Dr. Massie has used allopathic agencies; his book does recommend them; the* "*Edinburgh*" journal, whilst in Cincinnati, and before it took on *foreign toadyism*, *did recommend the book as eclectic*, and *its author* as an *eclectic Goliah;* and that, on this account *he* was elected *eclectic* "Prof. of Theory and Practice in the E. M. Institute," and this identical book now stands as an approved text book in the Circular of the Institute. But when the book is shown up; the school compromised; its doctrines branded with *allopathy on his account;* the "*Edinburgh*" very complacently kicks *Dr. Massie* out of the Institute Halls, by visiting him with "severe attacks of pulmonary hæmorrhage"– thinking no doubt, that by this ruse he may prevent the hæmorrhage under which his school is suffering, from continuing *ad deliqusum.* But it is too late, the Cincinnati et "Edinburgh," must inevitably faint, with very little prospect of reaction. Illinoisan.

PALMER'S PATENT LEG AND ARM.

By the politeness of B. Frank Palmer, Esq., we have received the electrotype cuts of his artificial Leg and Arm, together with "descriptions" "specifications," and "puffs,"—all of which would occupy six or eight pages of our Journal. These he modestly requests us to publish (for the benefit of our readers, it is supposed,) in our present issue. In reply to this solicitation we would respectfully suggest that we have a large space devoted to advertisements outside of our regular columns, which any one having matter of interest to the profession, can occupy at reasonable rates. For no consideration do we grant any one the privilege of filling with personal material, the pages assigned for other purposes. We will gratutiously say for Mr. Palmer, that he makes a fine leg, and has done much in the way of perfecting artificial substitutes for lost limbs. Whether his leg be every way superior to those of other artists, may be a question among good judges.

Other leg makers have requested us to publish lengthy descriptions of their skill and handiwork, but we have not regarded them of sufficient interest to our readers to warrant the undertaking. If any surgical mechanician wishes, under his own name, to communicate anything of professional value in a condensed form, concerning his inventions, (even though they be *patented*) our columns are open to him.

The Knickerbocker Magazine for February, contains two articles of interest to the profession. The description of *The Jardin des Plantes* of Paris although not full, is possessed of uncommon interest, and possibly will stimulate some of the denizens of New York to the establishment of a similar one on or near the island of Manhattan.

But the profession owes the publisher a debt of gratitude for the article entitled, "*A Grain of Wheat, from a Bushel of Chaff*," in which the facts in connection with the introduction of the use of the vapor of ether for the purpose of producing anæsthesia are detailed substantially the same as published in the COLLEGE JOURNAL for April, 1858, by Prof. Cleaveland, but more in detail than was consistent with the historical reminiscence given by Prof. Cleaveland in his article on Amylene. The evidence that Mr. Wells during the years 1844, 1845, and 1846, made use of both the vapor or gas of sulphuric ether, and that of nitrous oxyde, is too full and conclusive to admit a doubt. And that his use of these agents for this purpose, was known to his former partner, W. G. T. Morton, is also apparently beyond dispute; and these facts should be known by the public, as well as the profession, that the honor, if any, should be awarded where it is due. The Home Journal, of late date, has an article on the same subject, but filled with errors.

MARRIED.

In Gosport, Indiana, February 24th, by Rev. S. Rawson, H. G. OSGOOD, M. D., to MISS HATTIE LYONS, all of Gosport Indiana.

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ORIGINAL CONTRIBUTIONS.

CAPILLARY CIRCULATION.

BY PROF. T. E. ST. JOHN.

In passing from the arteries to the veins the blood traverses a distinct set of vessels, the capillaries, which, although continuous with both, are in many regards entirely different from either. The capillaries, so named from their minute size and hair-like appearance, are about $\frac{1}{3000}$ of an inch in diameter in the human subject, and composed of a single, transparent, elastic, tubular membrane, in which may be seen at various intervals, oval nuclei which resemble those of unstriated muscular fibre. As the terminal artery approaches the capillaries, it gradually decreases in size, loses its external fibrous coat, the middle coat diminishes in thickness and finally disappears entirely, leaving the capillary vessel provided with but one coat which is continuous with the inner homogeneous membrane of the arterial wall. The finest capillary vessels are found in the brain, the largest in the lungs and liver. The capillaries from which the structures of the body derive nourishment, form a plexus in each tissue or organ. This plexus is observed to exhibit peculiarities of arrangement adapted to the manner in which the proximate principles of each organ or tissue are arranged. In muscle, nerve, and fibrous tissue, the capillary vessels are disposed in lines parallel to the fibres, communicating frequently with each other by cross branches forming elongated meshes. In convoluted mucous membrane, as that of the stomach and intestines, the capillaries form plexuses with circular meshes, corresponding as much as may be with the arrangement of the membrane itself. In serous and in simple mucous membranes, the plexus of capillaries presents large and irregular meshes developed in the subserous or submucous areolar tissue. When a mucous membrane is covered with elongated papillæ or villi, the capillaries are distributed to each papilla or villus forming a tuft of minute vessels ramifying in its interior.

One peculiarity of the capillaries in which they differ from the other portions of the circulatory apparatus, is their frequent inosculation. The arteries continually divide and subdivide until they terminate in the capillaries; the veins, commencing at the capillaries, unite with each other, forming the larger trunks by which the blood is returned to the heart and lungs. But the capillaries simply inosculate without increasing or diminishing in size, forming a *capillary plexus* which is in direct contact with the proximate elements of which the various tissues and organs of the body are composed. Although it is the rule that this intermediate set of vessels or capillaries is found between the arteries and veins, constituting their connecting link, yet there are in the body two remarkable exceptions,—the erectile tissue of the penis, and the uterine circulation;—in both of which the blood passes directly from the arteries to the veins. Harvey knew nothing of the communication between these two systems of vessels, but supposed that the blood was poured directly into the parenchyma of the tissues, from which it was withdrawn by the veins, after having supplied the tissues with the substances they required for their growth; and it was not until about 1587 when Malpighi with the microscope demonstrated the existence of the capillaries, that any thing was known of them. For a more perfect knowledge of these vessels anatomists are indebted to Prochaska, who gave a minute and accurate description of them, based upon his own and Lieberkuhn's injections, than which there is not a more complete and correct description given by any writers of modern times.

The *motion of the blood in the capillaries* is one of the phenomena of life that can be seen only by the aid of the microscope;—it may be studied in any transparent living tissue of sufficient vascularity, as the web of a frog's foot, or the bat's ear or wing. In observing the capillary circulation, a few peculiarites will be seen which serve to distinguish it from the circulation in other portions of the vascular system. It is considerably less rapid than in either the arteries or veins, is steady and continuous in its flow, exhibiting none of the successive jets that characterize the arterial circulation, and appearing to be accompanied by no dilatation or contraction of the capillary walls, flowing on as if passing through inelastic inorganic tubes. A remarkable phenomenon of the capillary circulation is, it appears to have no regular course; the numerous streams pass in any and all directions around the little islets of the solid particles of the tissue in which the blood is circulating through the innumerable channels of which the capillary plexus is composed. Neither do they tend to any particular point, but rush on, some in one direction, some in another, above and below each other, at right angles, or in opposite directions to each other's course; thus allowing the blood to come into intimate contact with each and every part of the tissue to be supplied. The blood corpuscles are most frequently seen passing in a single row with variable intervals between them; sometimes, however, they rush in two's or three's, according to the size of the vessel through which they flow.

Another peculiar feature in the capillary circulation, is the greater velocity of the stream in the center; while towards the circumference it becomes much slower, and the layer of fluid that is in direct contact with the capillary wall is almost, or completely still. By an examination of the different portions of the stream it will be observed that the red particles or corpuscles occupy for the most part the center of the current, while the outer portion is made up almost entirely of the liquor sanguinis, with here and there a white corpuscle adhering to the wall of the vessel. The sudden withdrawal of these white particles from the center to the circumference of the stream, serves to display in a beautiful manner, a peculiar feature of this portion of the capillary current, which, from its comparative stillness, and the very small number of blood particles in it, has received the name of the *still layer* of the *liquor sanguinis*.

The existence of this still layer is partly a physical and partly a *vital* phenomenon;—physical, so far as it is identical with that which is known to take place when fluids pass through inorganic tubes, in which the outer layer appears to adhere, or be attracted to the sides of the tubes; *vital*, so for as it may be occasioned by the affinity that evidently exists between the substances in the circulating fluid and the tissues destined to be nourished. It is during the capillary circulation that the great changes occur in the blood, where at one point it gives off to the various tissues the material they require for their growth; and at another it receives from different sources of supply those constituents which render it capable of becoming a nutritive fluid for all portions of the body.

The forces which keep up the circulation in the capillaries are entirely different from those upon which the arterial circulation depends. It is stated, however, by some that the *vis a tergo* of the heart is the principal agent in maintaining the capillary circulation, in proof of which many circumstances connected with the circulation of the blood are presented, among which are the following:

1. "The pressure of the blood may be measured in the *veins*, in the same way as in the arteries, which varies with the force of the heart.

2. "The capillary and venous circulation in any segment of the body, is greatly influenced by the circulation in the main artery in that segment.

3. "In Fishes the whole blood ejected from the heart passes through the bronchial capillaries before entering the general circulation."

That these facts may all be correct I do not deny, but that they prove the agency of the heart in keeping up the capillary circulation, is not evident. Instead of proving that the power of the heart is the main force, it will readily be seen that these very phenomena are produced by the passage of the blood through the capillary plexus, which is entirely independent of the heart's action. The heart, by its constant and vigorous contractions, forces the blood through the arteries, giving rise to the peculiar motion called the pulse, and secures a constant supply of the circulating fluid to the commencement of the capillaries; but farther than that it has no power or control over the continuation of the current through the latter vessels. If the capillary circulation requires a central contractile organ, which like a huge forcing pump shall drive the blood through these winding and hair-like passages, how is it that the capillary circulation which is well known to exist in vegetables, is continued without the aid of such an arrangement. It is impossible to explain many of the phenomena connected with the circulation if we attribute to the heart the sole agency in supplying the force by which the current is continued in all parts of the circulatory apparatus. It is shown by common observation that the capillary circulation may be increased or diminished in a particular portion of the body from causes of purely a local character, which are entirely unconnected with and independent of the heart's action. The temporary flush of the features consequent on peculiar mental impressions, or the pale and blanched appearance which the recital of unwelcome news will occasion, are familiar examples of this. The temporary congestions that may take place in the stomach and intestines during the progress of digestion, indicate that a greater quantity of blood may pass through them in a given time, although the action of the heart remains the same.

It is evident that the forces which determine the continuence of the capillary current are resident in the capillary vessels themselves. In the ordinary molecular changes which are going on during the progress of nutrition in the tissues, *a force is generated* which not only promotes the flow of the blood in the capillaries, but drives it through them and constitutes a *vis a tergo* which is one of the most efficient causes of the venous circulation. It is by this attractive force which exists between the corpuscles of the blood and the vivifying influences of the atmosphere, that drives the blood through the pulmonary capillaries, as is proven by the phenomena of asphyxia, in which a stoppage of the blood will take place at the capillaries notwithstanding the continuence of the heart's action. The capillary circulation is therefore not only independent of the heart's action during life, but will even continue for a time after the heart has stopped; so that at death the capillaries and the smaller arteries empty themselves of blood, which is thrown into the larger branches of the veins. The current of blood in the fœtus passes through the foramen ovale and ductus arteriosus; and how is it possible, if the circulation depends entirely upon the action of the heart, that its course should be so suddenly changed at the moment of birth? Surely there must be a force existing and directing the blood current independent of that of the heart, to explain this phenomenon of the circulation. This is the *capillary force;* it is not only independent of the action of the heart, but it may readily be proven that even the heart's action is, to a great measure, dependent upon it. The infant as it draws its first breath, enters upon a new era in its existence; an entire change instantly occurs in the course of the blood current, which is now drawn from the heart to the lungs. Its passage into these new channels does not depend upon the heart's action, but the operation of this *capillary force* exerted in the pulmonary vessels. Exercise may increase the frequency and force of the heart's contractions, but the effect is secondary; the heart works faster because of the previous increase in the capillary circulation. The waste of the tissues being excessive during active exercise, their demand for building material is increased, the blood is compelled to pass with greater velocity in order to provide the necessary particles of nutrition, the arteries are drained more quickly, which excites the heart to an increased action in order to present the blood to the capillaries through the arteries, in quantities suited to the demand.

From these facts it may be concluded that the capillary circulation is dependent upon the forces generated in the tissues themselves by those chemical and physical changes which take place between the blood and the tissues in which the process of nutrition essentially consists, and also in the process of respiration by which the blood is oxygenated, or arterialized, and fitted to fulfil its functions in the animal economy. By this theory a reason may be assigned for these various phenomena of the circulation which cannot be explained by any other hypothesis; the temporay increase of blood in the capillary circulations dependent upon local causes; the indefiniteness and irregularity of the capillary circulation seen under the microscope; the phenomena of acardiac fœtuses; the force which drives the blood through the veins; local inflammation; the result of asphyxia; the empty condition of the arteries after death, etc.

The motion of the blood current in the capillaries is much slower than in either the arteries or veins. According to the investigations of Volkman, Valentine, Weber, and others it flows at the rate of about two inches in the minute. To allow of this diminished rapidity of flow, the united calibre of the capillaries is found to be from 350 to 400 times greater then that of the arteries, which allows a comparatively small quantity of blood to be spread out over a large surface, thus materially favoring the processes of nutrition.

FORM OF INCISION FOR EXTRACTING NEEDLES, ETC.

BY J. DAVISON, M. D.

Few wounds of a punctured character are of more frequent occurrence than those occasioned by the accidental penetration of needles into the hands and feet. After entrance, these slender bodies not unfrequently break off, a piece of the point remaining deep in the soft tissues. Such accidents though often considered trivial, many times are followed by paralysis, tetanus, or destructive inflammation.

Most surgical works give no definite directions for the removal of minute bodies, as broken needles, slender pieces of glass, etc., and those which do refer to the subject, recommend a simple straight incision, which in half the cases, will, with the futile efforts at extraction, sink the foreign substance deeper than it was before any such attempt was made. After a painful, dangerous and hacking dissection, followed by a failure, the patient is dismissed with the advice to poultice the part, and "trust to nature." In this way I have known patients to apply to half a dozen surgeons without success. Lately in a case of this kind, I had the opportunity of verifying the excellence of the plan laid down in the Feb. Number of the College Journal for 1857, which directs that two incisions be made both beginning at the same point and diverging to an extent that the triangular space included between the incisions and the base of the flap shall cover the body sought. The position of the body can generally be nearly enough determined by palpitation and the sensations of the patient, to indicate where the incisions should be made.

Mrs. B., on the evening of Dec. 10th, came to me, stating that some hours before, a needle had penetrated the palm of her hand, and having broken, a part remained buried in the flesh. Her hand was much swollen , irritation having been produced by attempts at extraction. She could not tell exactly where it was, nor could I feel it. I proposed dissecting up a flap of the integument, but was refused a trial. She went away and did not present herself again for five weeks, during the time she had travelled thirty miles to visit two surgeons and a "nat'ral doctor." Her hand, now very painful and swollen, had been incised in several places, poulticed and "trusted to nature," but the needle remained. She was now ready to undergo the operation I had formerly proposed. Consequently I dissected up a triangular piece of skin, made a brief search for the needle, but on account of the depth of the needle, was unable to reach and extract it. I then removed the flap, and told her to apply some shoe-maker's wax to the wound, and call again in two days. At the end of the time I removed the plaster, and found a small suppurating point within the triangular space. This being cleaned away, and the fingers straightened, the needle flew out upon the floor. I think the wax saved me one of those "troublesome dissections" spoken of by Erichsen in such cases, and which are not without danger of vexatious hemorrhage. Be this as it may, I shall try the same plan again under like circumstances, and recommend it to the favorable notice of those who have not given the plan a trial.

FEVER IN WESTERN NEW YORK.

BY W. W. GARDNER, M. D.

That a wide field lies before us, for investigation and study into the source and character of our fevers, seems to be very apparent, and although the present paper is not expected to throw much light upon the subject, it is offered as being better adapted to the end in view, than a detail of uninteresting individual cases, the interest of which might depend more on anomalies, which were more curious than instructive.

The observations to which I call attention, were made at War-saw, Wyoming Co., N. Y., which lies at the apex of a valley of which Lake Ontario, sixty miles north, is the base. It is situated east from Lake Erie about forty miles, on a small stream of water, the source of which in a direct line is not over four miles distant, and its outlet into the Genesee river about forty miles. Within the County are two or three small lakes. The face of the country is uneven and hilly, but not mountainous. Although we have to travel east, south and west, several miles at quite an angle of elevation before we arrive at the summit of the hills, no line of demarkation is drawn, in the present paper, between cases in the village and those of surrounding towns. Gneiss and Limestone are the principal mineral formations. The water is generally hard and the soil clay; our wells are sometimes tainted with sulphureted hydrogen so as to be quite offensive, and there are a few sulphur springs. The average temperature of the atmosphere is about 50° F. but for two years past it has ranged much lower. The country has been settled about fifty years, during which time a large part of the forest timber has been removed to make way for wheat and other agricultural products.

It is a matter of regret that no more accurate details of the weather can be given. I can only say that the summer of 1855 was unusually dry, that of 1856 very moist, and in 1857 unusully dry again, while in 1858 nothing remarkable was noted.

The leading symptoms of the fevers of 1856 might be described as follows. In the first or formative stage, the patient would for a few days, be a little indisposed, generally a loss of appetite or a slight cold would be the only complaint, when suddenly severe chills, with pains in the head would supervene, attended with a frequent full pulse, hot dry skin, coated tongue, followed soon by delirium. The urine would be high colored and scanty, the bowels constipated, and in the later stages of the fever sordes on the teeth, tympanitis, subsultus tendinum and coma. The rose lenticular spots of Louis were present in some cases, and may have been in all, but if so, were so indefinite as to escape notice. They usually occured between the seventh and tenth day, and in many cases amendment would commence at the same time, and continue until the eleventh day, when a sudden accession of fever would take place and on the twelth day the surface of both body and limbs would be one red blotch, resembling urticaria in every particular. At the end of three days improvement would again be manifest, and in a day or two after, convalescence be complete.

Other cases would continue without much variation, with a pulse at 112 for twenty-one days, and then without any sudden crisis would slowly improve for ten days or more, and usually much longer before complete recovery of health and strength.

Diarrhœa was only present in a very few cases. In one case after the use of new cider, diarrhœa was developed and fatal hemorrhage followed. This took place twelve days after the urticaria came on, and there was only one evacuation of blood, which measured about two quarts. It may be well also to remark that in this case the pulse in the early part of the fever rose to 140, and although the patient improved so as to sit up a large part of the day, it never lessened in frequency. Three others in the same family had the same fever at or about the same time, and two appeared much more seriously affected in every particular, excepting the pulse, than this fatal one. One of this family had diarrhœa after he was able to ride about, which required some attention. During the first few days of fever, there were usually slight remissions and exacerbations daily, but I think no more than are observable in all acute diseases in this vicinity.

The exhibition of asclepias tuberosa in hot infusion, or the fluid extract in hot infusion of catnip during the active stage attended with hot dry skin, and given cold in the later stages of the fever, constituted the internal medication. Cold infusions of mullein and slippery elm were also used freely; and in severe cases, carb. ammonia and serpentaria were used as adjuvants. Externally, the whisky, hand or sponge bath, generally once in four hours, and an occasional alkaline, were never omitted. During the whole progress of the fever gum Arabic was used as food, but if the appetite was good in the early part of the fever, milk porridge made with wheat flour was ordered, and during the exhaustive stages, mutton or beef broth, and wine whey.

The last case of this type which came under my charge was in Feb. 1857, it was more purely typhoid than all the previous ones—bronchitis, typhopneumonia, diarrhœa, tympanitis, diaphoresis, sudamina and the rose spots, were all present in a remarkable degree. Three cases only and those of Bilious Remittent type, came under treatment during the spring. About the middle of June an endemic commenced, and eventually six cases were treated prior to Dec. following. The symptoms of the cases first occurring were remarkable for daily remissions and exacerbations, and every other day an increase of all the phenomena and indeed this peculiarity continued through the whole endemic.

Severe pain at the base of the cranium and in the lumbar regions, the pulse ranging from 40 to 60, skin cold, tongue yellow or brown, anorexia, constipation, and stupor or wakefulness, urine high colored and scanty; is a true history of each case.

Quinia and prus. iron and gelseminum with leptandrine and podophyllin as adjuvants, secured a convalescence between the fourth and seventh day from the attack, if the treatment commenced early.

Later in the season the pulse increased so that in August they ranged from 70 to 100, and additional to the symptoms just described, there would be severe pain in the epigastrium and perhaps vomiting, these symptoms, generally, beginning at the termination of remissions, but latterly in August and September, many cases commenced with vomiting and gastric symptoms, and late in September and October, many cases were ushered in by peritonitis or gastro-enteritis, the pulse ranging from 112 to 160. In Nov. the endemic abated and in Dec. only three cases were treated within its bounds. All of these cases were treated within five miles of a central nucleus.

In *all* cases the antiperiodic treatment was exhibited, also gelseminum with adjuvants to correspond with local derangement.

Cholol gogues were not tolerated until after the cessation of gastric symptoms, unless iodine may be excepted ; in a few cases followed by severe jaundice it was used with ext. of sang. Canadensis and with good effect, while podophyllin would increase the gastric symptoms in ordinary or even minimum doses.

Cerebro-spinal meningitis complicated one case—a woman three months pregnant, and it was with some misgivings that quinia and iron were ordered but its operation was as remarkable on the remissions as in any other case, and nothing unpleasant followed.

In the latter cases as the pulse rose there would be a hot dry skin, demanding the alkaline sponge bath, and although remissions ceased on or before the seventh day, febrile action continued to the ninth and fourteenth day. Diet in all cases gum Arabic and toast water. Milk porridge or Indian meal gruel in the beginning of convalescence, and finally broths and sometimes tonics.

It will not be expected that I should know much of cases elsewhere, or under other physicians care. I am of the opinion that most of the endemic came under my notice, there were some other cases that I saw under other's care of the same type. We have one physician here who declares "this is no country for remittent fevers." Under his care several deaths occurred from congestion of the brain, inflammation of the bowels, etc., during this time, but I fear that a false diagnosis had much to do with this fatality.

The fevers of 1858 have again presented the typho-remittent type of 1856, but are much less regular in their course. Their nature and treatment with some individual cases, I propose to furnish in another paper.

TINCTURE OF VERATRUM VIRIDE.

BY PROF. C. H. CLEAVELAND.

DURING the past few years the profession have had their attention called in a special manner, to the action of Veratrum Viride, as a therapeutic agent.

Several circumstances have influenced the profession to give an unusual amount of attention to this and kindred agents. Much had been said by the followers of Thomson and others, of the harm produced by the frequent use of the lancet, and other depletory measures, until many had concluded that *stimulation* was demanded in all cases of fever and inflammation; and as blood-letting was esteemed *the* sedative to which resort was often had by its advocates, and injury and not benefit was observed to follow its use, all sedatives were pronounced injuriious, and proscribed by the ultra advocates of stimulation.

While the profession were not convinced of the correctness of the ultra notions of these people, they were more and more clearly led to perceive the harm that followed the use of the lancet, and to endeavor to find some agent which would control the action of the heart, and the circulation, without the necessity of abstraction of the vital fluid.

In inflammation of the lungs especially, was it found desirable to control the force of the circulation, and at the same time sustain the vital power of the general system, so that the delicate tissues of which the lungs are composed, should not yield to the force of the disease, and be disorganized beyond repair.

Tartarized antimony and potassa, or as it is more familiarly known, tartar-emetic, had been observed to exert a remarkably sedative and controlling influence over the heart; and as it could be given even to children without difficulty, it was often resorted to in place of blood-letting in inflammation of the lungs, and various forms of fever. But experience has shown, that instead of tending to preserve the lungs or other diseased organs from disorganization, it tends with certainty and no small degree of activity, to hasten decomposition and dissolution. Hence its use in inflammations and fevers has been discussed and discountenanced by the more observant and scientific of the profession.

Digitalis, which has great power in controlling the heart, has also been resorted to, in place of the lancet; but it has proved to be *cumulative* in the system, and hence fraught with a danger which cannot be foreseen or guarded against, and it, too, has been discarded from use by many.

Of late, Veratrum Viride has been used for these purposes and has proved itself to be so certain, powerful, efficient, and when properly managed, safe, a sedative to the heart and circulation, as to be hailed with joy and heralded with enthusiasm, as the long sought and earnestly desired substitute for the lancet, antimony, and digitalis; which, even by those who still made use of them, were always esteemed dangerous, and often hurtful instead of remedial.

At present, perhaps, there are but two remedies which are likely to be considered as in any degree rivals to veratrum viride, viz., gelseminum, and aconite; but they, can here have but this passing allusion made to them.

As the profession have but recently, become fully convinced of the inutility and positive hurtfulness of blood-letting, the value of this substitute has not until lately been appreciated, and what had been taught and published formerly, has not attracted the attention its importance deserved; and credit has been given to recent claims for the discovery of the power and value of the agent, but little creditable to the knowledge and literary research of those who have admitted these claims and certainly far from creditable to the individual who has made them, or those who have carelessly given him their endorsement.

Respectable Medical periodicals have given endorsement to the claims of Dr. Norwood, as the original discoverer of the therapeutic properties of veratrum viride; and to place before the readers of the College Journal a true history of this matter, a little space may be fairly devoted to a consideration of the historical facts connected with the introduction of this plant to the profession, as well as to its real therapeutic value. Its botanical character is omitted for want of space, and also because it has been so fully described by Aiton, in his *Hort. Rev.*; Lindley in his *Fl. Med.*; Bigelow, in his *Med. Bot.*; Worthington in the *Am. Jour. of Pharm.*; Michaus in his *Fl. Bot. Am.*, as well as by most modern writers on Botany and Materia Medica.

Although the therapeutic action of this plant was known to many physicians in New England, and taught by Prof. Tully for many years to the succeeding classes of students who were the favored recipients of his instruction, the body of the profession in America seem not to have been aware of its great utility, until Dr. Osgood published his *Observation on the Medicinal Properties of Veratrum Viride*, in the *American Journal of Medical Science*, for August, 1835. That article attracted no small share of attention at the time of its publication, and gave a clear, full, and correct account of its action on the system, and especially as a *sedative* to the nerves controlling the function and the organs of *circulation*: and, probably, led T. R. Mitchel to publish his *Inaugural Essay* in the *Am. Jour. of Pharm.*, in Oct.. 1837, as well as the *Notes* of Augustus Duhamel in the same Journal, on Veratria, and the *Inaugural Essay*, of H. W. Worthington in the same Journal, in July 1838, in which he referred to Biglow's *Med. Botany* in regard to its botanical history and therapeutical properties. Dr. Worthington made a trial of it on his own person and said: "During the action of this dose the pulse was weakened so as to be scarcely perceptible, and was reduced from 68 to 52 pulsations per minute." The extract produced similar effects, and a third dose, taken after an interval of several weeks produced the same results. "In none of these experiments, was there any disposition to catharsis."

As Dr. Osgood's paper was more complete than the others, and as it was probably the first which attracted the special and marked attention of the profession to this plant, it seems but proper to refer to it more fully. It as has been shown, was published in August 1835. In it he quotes Prof. Tully, as one having "extensively used" the article,and as its being possessed of alterative, emetic, epispastic, errhine, antipsoraic, chologentic, expectorant, diuretic, sialagentic, diaphoretic powers, and as probably emmenagentic properties; but "never a cathartic, leaving the bowels in a good condition."

"Its narcotic effects are very prominent, and when the system is brought fully under its influence, are manifested by faintness, somnolency, dimness of sight, dilatation of the pupils, vertigo, headache, impaired muscular action, hiccough, cold clammy sweat, *small, unfrequent*, and *compressible pulse*. By the exhibition of full doses, I have frequently known the pulse, when ranging from 73 to 80 in the minute, reduced to 35 or 40, in the course of a few hours." The tincture was the form of preparation preferred by Dr. Osgood and by Prof. Tully, and by them recommended to the profession.

Dr. Osgood did not simply state the opinions entertained by Prof. Tully and himself, but reports Cases in which it had been used by him. In one of the cases reported, the pulse was reduced in frequency from 90 to 55 in the minute, and in another from 95 to 40 beats in the minute.

In *pneumonia*, Dr. Osgood reports to have used it with decided benefit, but he found it better in most cases to combine a small quantity of *opium* with the tincture, and he give it in "full doses, and repeated at short intervals."

In *gout*, *rheumatism*, and *asthma*, it was found of great value by Prof. Tully and Dr. Osgood. I have used it since 1842 as a very valuable remedial agent in rheumatism, but more especially in that peculiar form of disease known as *chronic rheumatism*. In asthma it is advised to combine it with a full dose of opium. Its value in these cases may in part be owing to the presence of *veratria*, which Dr. Richardson, and modern investigators have found it to contain.

As an *antidote*, when its depressing effects were to be guarded against, or counteracted, Dr. Osgood said, "I have invariably succeeded with small doses of *laudanum* and *brandy*, often repeated."

Much more evidence might be produced, proving that Prof. Tully, Dr. Osgood, and such physicians as obtained their medical education at Yale College, were well acquainted with the properties of this plant; *and it can be readily shown that Dr. Norwood, who was a pupil of Prof. Tully's, obtained his information from the same source.*

But these men, were in advance of the profession in this matter, and the information they imparted to the profession, was not esteemed of sufficient value to attract special attention. The great body of physicians out of New England, and especially those who had been taught at Philadelphia, seemed to think that the lancet, and blood-letting were almost *sacred;* and to teach that it was possible they could be dispensed with, or a better and safer substitute could be found, was considered a heresy not be tolerated.

Even at the present time the *lancet* is worn in the bosoms of the shirt, and depicted on the title-page of some periodicals, as symbolic of the healing art, instead of being considered the death-dealing weapon the progress of modern science has proved it to be. Owing to this unreasoning prejudice in the profession, in favor of bleeding in inflammations and fevers, and especially in cases of inflammation of the lungs or pleura, the teaching and writings of Prof. Tully and Dr. Osgood did not make that impression upon the minds of those in the profession, which their utility and value entitled them to.

Dr. Norwood, even, who had passed a part, at least, of his pupilage in New England, and in immediate contact with these ideas as promulgated at Yale, on commencing practice at his Southern home, did not at once put the use of veratrum viride to the test of a trial of its power; but, as he stated in a communication to a little sheet, the *People's Medical Gazette*, he had found his practice so unsatisfactory, and the fatality among his patients so great during the years 1842, '43, and '44 that he was "driven in search of any means or method that even shadowed forth a prospect of success."

From his statements, as well as the *words* used (which in many instances are a close copy of those used by Dr. Osgood, in the article quoted from,) there seems no room for doubt, that in this "search," he became acquainted with the article published by Dr. Osgood nearly ten years previously. In this communication to the People's Medical Gazette, he intimates that he had already offered his views to the *profession*, through the channel of professional publications, and had been refused a hearing. In his note addressed to the Editor, he said: "Your Gazette is the only medium through which the people can rely for correct medical information, etc."

The researches, he says, were prosecuted "with the most anxious solicitude up to 1846, during which time we had satisfied ourselves of its value in pneumonia, and being called in council, during the *same year*, we stated the facts to Dr. Jas. Stewart," After calling the attention of the people, to this agent, as above stated, through the *People's Medical Gazette*, and inducing some of his professional friends to test its value, he wrote a series of articles to the *Southern Medical and Surgical Journal*, and in other modes as well as by the circulation of his pamphlet, has done very much to call the attention of the profession to this agent, and also to the inutility and harmfulness of bleeding in pneumonia and other inflammations and fevers.

Had Dr. Norwood given proper credit to Dr. Osgood, and Prof. Tully; and had he also given to the profession his method of preparing the Tincture, the profession would esteem him a great benefactor to it and to humanity. But as the matter now stands, Dr. Norwood and his Tincture, as Prof. Jackson and the Letheon, are decidedly unpleasant subjects for professional consideration.

VERATRUM VIRIDE.

BY J. DOYLE, M. D.

For the past two or three years I have employed the tincture of veratrum viride quite extensively in my practice. My attention was first called to the article in 1854, by reading Dr. Norwood's essay upon its therapeutic powers. But in consequence of the difficulty of obtaining a pure article I had not at that time an opportunity to test it thoroughly. Many may have been misled as I at one time was, by using an article prepared by the New Lebanon Shakers, labelled "White Hellebore," "Veratrum Viride." The Tincture with which my experiments have been made was prepared from the powdered root of the "American Hellebore." My method of preparing the tincture is as follows:—

Take of the pulverized root one half pound, thoroughly moisten in alcohol and allow it to stand twenty-four hours, place in a percolator, pour on alcohol gradually until sixteen ounces have passed, and filter. I sometimes pass the tincture through in the same manner a second time. Of the tincture thus prepared I usually give to an adult eight drops every three hours, until nausea or emesis is produced.

The diseases in which I have mainly used the article have been Pneumonia and Typhoid Fever. Of the former disease I have treated a large number of cases, of various grades, and in many cases I have used no other remedy. In nearly all I have used no other diaphoetic or expectorant.

My usual method of employing this remedy in pneumonia is this. I drop sixty-four drops of the tincture into a vial and add eight tea-spoonfuls of water. Of the mixture I order one teaspoonful to be taken every three hours until nausea or vomiting is produced, after which I order one half teaspoonful or less according to its effects, every fourth hour. Usually after the third or fourth dose, emesis occurs, the pulse is reduced to nearly or quite the normal standard, and all the symptoms have abated. I then continue the remedy in sufficient doses to keep the pulse at from sixty to ninety until the convalescence of the patient renders it no longer necessary.

So confident have I become in the employment of the article that I usually inform my patients upon my first visit, that by the following day they will be much better; and I look with no greater certainty for the arrest of an ordinary intermittent fever, by the exhibition of sulph. quinia than I look for the reduced pulse, the free expectoration, the moist skin etc., in pneumonia, upon my second visit. I prefer the plan of mixing the tincture with water, to that of leaving it to be dropped by a nervous nurse, as most likely to secure the proper dose.

I perceive that some of the contributors to the Collge Journal advise that it should never be given to the extent of producing emesis. I have tried both methods and have been more succesful in those cases in which emesis was produced, nor has any case occurred in which any injury was produced by this effect. In some cases the vomiting subsides in a short time, but in a few occasions I have found it necessary to administer remedies to allay the nausea. Usually the omission of one dose of the remedy is sufficient, nor is this often required.

In a few cases I have found it necessary to increase the dose to ten or twelve drops, in one case to twenty drops.

VERATRUM VIRIDE.

BY T. C. MILLER, M. D.

The root of the American Helebore has a bitter, extremely acrid taste, which is very persistent, and leaves a permanent impression in the mouth after the taste has passed away. In some regards it acts on the system somewhat as to the black and white varieties, but is not so violent, and never purges. However applied, it causes vomiting with deep nausea, and other indications of its sedative power over the great vagus nerve, and consequently over the functions of circulation and respiration; so that a reduction of the force and frequency of the pulse, and of the respiration is quite constantly manifested on its exhibition, especially if the use of the remedy be long continued.

Besides its more manifest action on respiration and circulation, I have also observed that it acts promptly upon the lymphatic and glandular organs, and it quite often leads to an increase in the quantity of urine voided. But its action on the kidneys is not always manifest. The diuresis seems to be in an inverse ratio to the nausea and vomiting, and where the vomiting has been quite free, there is but little if any increase in the flow of urine.

The large doses recommended by Dr. Norwood often injure the digestive organs, and most physicians now admit that any considerable amount of nausea, with vomiting, colic, diarrhœa, etc., must prove hurtful to the patients. I have observed congestion of the head, vertigo, fainting, delirium, stupor, dilatation of the pupils, and other alarming results to follow the administration of large doses.

For a considerable period of time I administered the tincture to healthy young men, both in small and in large doses. At first there was every indication of stimulation, as with other narcotics, with an increase in the frequency of the pulsations, with nausea, which continues until vomiting ensues, at which point the stimulation appears at its height, and then there is an abatement both in the volume and the rapidity of the pulsation.

In pneumonia and bronchitis, the value of veratrum is well established. So also in spitting of blood, in hæmorrhage of the lungs, and dyspnœa.

Dr. Norwood's tincture is preferred by many, but I am satisfied it has no superiority over ordinary well prepared tincture. I have been accustomed to make a preparation which I am satisfied is far superior to Norwood's or any other preparation which I have ever used. I call it *Tinctura Veratri Viridi Acida.* It is made by taking two ounces of recently dried and pulverized root of veratrum viride, one pint of alcohol, and one fluid drachm of pure sulphuric acid. The acid is first to be added slowly and by degrees to the alcohol, which is then poured on the pulverized root, and allowed to macerate fourteen days, and then filtered. The dose of this is from two to six drops, and the small quantity of sulphuric acid does not in the least interfere with the therapeutical effects of the plant.

In the same manner I prepare the tinctures of aconite, belladonna, cimicifugia, conium, digitalis, hyosciamus, phytollacca, and stramonium, and am sure that the acidulated alcohol is a better solvent for the alkaloid active principle of these plants, than pure alcohol can be.

SYPHILITIC ERUPTIONS.

BY A. B. JACKSON, M. D.

Every physician is aware that local or primary syphilis, if left to itself, or is not cured, in time will become systemic or constitutional. In the December No. (1858,) of the College Journal, I demonstrated by citing examples and quoting from reputable authors, that systemic or constitutional syphilis, may be transferred from one person to another by kissing, coition, and nursing. And nobody will deny that the disease may be transmitted hereditarily. A tainted sire begets venereally affected progeny; and if the mother be not previously contaminated by coition, she is liable to become so by gestating and suckling polluted offspring.

Next to venereal ulcerations in the mouth and throat, syphilitic eruptions upon the skin make their appearance in the usual pathological cycles of this malady. But to describe the many forms such eruptions assume would require more space than could be profitably employed. The breaking out of a venereal exanthem is usually preceded by more or less constitutional disturbance. The patient is apt to suffer from what he calls a *flying* rheumatism which affects him one day in one place and the next in another. He finds himself growing thin of flesh and weak, and towards evening he is generally worse. He has a miserably dejected appearance, and his friends become alarmed about his going into a "decline." Quite frequently his hair will rapidly fall off, and he seems affected with premature old age. These symptoms are common but by no means unvarying. Often no premonitory signs attract the surgeon's or patient's attention.

Ultimately, from having taken some stimulating or irritating food drink, or medicine, or from no known or accountable exciting cause, an eruption appears; the breast and arms being most frequently the first in the order of attack. At once, upon the appearance of the exanthem which is attended with very little pain or uneasiness, the constitutional disturbance will abate or entirely subside. Sometimes the eruption will resemble measles, instances not being wanting where it was considered as such, and treated accordingly. At other times the eruption appears like tetter; again it will come out in a papular form, then become pustular, and finally degenerate into ulcers, exhibiting totally different characters in the same individual, at different periods, *from the same infection.* Two varieties of eruption, also, may exist at the same time in a single individual. To depict, then, all the deviating characteristics syphilitic eruptions may assume, would be profitless to the general practitioner. Works made costly with tinted engravings have been issued upon venereal diseases, and those who have the curiosity and means to obtain showy picture books can avail themselves of these productions. As a general thing a syphilitic eruption has a dirty, coppery hue; and if the exanthem pass into a state of ulceration, it will not lose this characteristic color. Another peculiarity of this form of the disease is, that the cuticle desquamates, large quantities of horny scales falling from the body, and collecting in the stockings, or bed linen. It is not uncommon to find the skin of a venereal patient studded with tubercles. These seem to invade the sebaceous glands and deeper structures of the cutis, infiltrating them, as the meshes of the lungs are filled in the primary stage of phthisis. The integuments contiguous to the anus are particularly liable to tubercular deposits of a syphilitic nature.

All of these eruptions are more detested on account of their disgusting appearance than the pain or irritation they produce. One of the most detestable forms is that which appears upon the forehead, producing discoloration, and ulceration, the disease spreading into new structures, leaving its old abodes to gradually heal and contract into a distorted cicatrix.

A syphilitic skin is not essentially different from that form of the disease which appears in the mouth and throat, affecting the mucous tissues. In fact it may be considered the same condition of the malady but in a little more advanced stage, as measles, scarlatina, and some other eruptive diseases affect the mouth, nose, and fauces before the skin is invaded.

Treatment of syphilitic cutaneous eruptions. From what has been already said concerning the character of constitutional syphilis in this and previous articles, it may be supposed that something besides external applications will be required to subdue the disease. In the skin affection, although the virus has left the blood to a considerable extent, and manifested itself by local disturbance, it has not been so completely driven from the "fluids" as to need no systemic medication. That syphilis has localized itself in a measure, when it appears in the skin, may be inferred from the relief experienced by the patient as soon as the eruption takes place. But to attempt a cure of it by external applications alone, would hazard a "striking in" of the exanthem, with a return of all the previous internal disturbance.

Remedies that are known to exert a destructive influence upon syphilitic virus should be administered, as in other forms or stages of the disease. Gold, potassium, sulphur, iron, iodine, kalmia, ampelopsis, sarsaparilla, corydalis, stillingia, buchu, etc., etc., constitute this class, and those first mentioned are in best repute. Not to be neglected in obstinate cases is the common preparation of arsenic called "Fowler's solution." I am aware that arsenic, as a remedial agent, has been rejected by eclectics, and very reasonably too from common use, but in certain obstinate skin diseases this mineral exerts a decided sanatary influence. To reject any agent before it is tried, either through prejudice or ignorance indicates a spirit not in keeping with the assumed liberality of a certain class of physicians, and savors of the universal denunciation sent forth by the self-styled "regulars," against all agents not found in their fore-fathers' pill-bags. In a previous article I alluded to few of the popular vegetable compounds used in treating constitutional syphilis,—some of which would almost put to shame the witches in Macbeth for the incompatibility of the potent agents. Though no "eye of newt, or toe of frog" nor "liver of blaspheming Jew," contributed to "make the hell-broth thick and slab," yet the ingredients of some of these wonder-working anti-venereal "syrups" were quite as unscientifically selected. I have among my "rare papers" a recipe presented to me by a venerable practitioner of Ohio, which designates *eighteen* different roots, herbs, and weeds, that were to be boiled six hours, then strained, and sweetened, and put into spirits, and frequently shook, to make an "alterative" reputed to be effectual in eradicating every vestige of scrofulous, mercurial, and venereal poison from the human body. Would to God such a miraculous medicine could be invented! Poor contaminated mortals might then hope to bask in the smiles of the ancient Hygeia. Next to the above "recipe" in point of potency may be mentioned the various "eclectro-chemical baths," now in use by the credulous and the roguish, which are said to remove from the system every trace of mineral or animal poison. Such baths are advertised in all the large towns and cities, and men claiming professional standing may be found engaged in duping the desperate and unwary.

But to the local treatment of syphilitic eruptions. The patient is exceedingly anxious to get rid of so unsightly a malady. At one time the "unguentum Apostolarum"— so called because it contained *twelve* ingredients—was deemed potent in removing the leprous malady. Not a few of the "hundreds of mercurial preparations" have been used in eradicating the disease. A few years ago mercurial fumigations were much in vogue among those who regarded that mineral as a specific in the treatment of syphilis, but the severe and uncontrollable ptyalism which often attended this method of administering the drug, has led the most judicious practitioners to abandon this plan altogether. In fact the non-mercurial treatment of syphilis in any form or stage has advocates among the most distinguished hospital and private surgeons, both here and in Europe. As an unguent for the local treatment of venereal cutaneous eruptions I have used satisfactorily, simple cerate and the sulphate of copper, five grains of the latter to an ounce of the former. But Fowler's solution of arsenic and glycerine affect a cure much more speedily. A fluid drachm of the former to a fluid ounce of the latter, is the form I have oftenest employed this mixture. Only a small part of the body is to be annointed with this each day. If it be used in large quantities over a considerable part of the body, enough of the arsenic might be absorbed to produce symptoms of poisoning. When the eruption is a mere efflorescence I do not use any external application, relying entirely upon internal agents. Syphilitic eruptions under any treatment do not pass off very rapidly, but gradually fade away, showing themselves most upon a cold day. As the virus of syphilis obstructs all the glandular system of the body, kalmia, stillingia, sarsaparilla and other gland stimulants, should be used in connection with the anti-syphilitic minerals previously recommended. The treatment is not to be abated after a few days or weeks, but it must be persevered in for months, even though the eruption vanish, and all the unpleasant symptoms of the disease subside.

HÆMOSTASIS AS A THERAPEUTIC AGENT.

BY THOMAS ELLIOT, M. D.

The term hæmostasis merely implies a means for the arrest of the blood in its course. It consists in applying a ligature around either or all of the extremities sufficiently tight to prevent the return of the blood in the superficial veins, and yet not impede the flow of blood through the arteries. Hæmostasis, as a remedial agent, is by no means new. It has been known and practiced by many physicians since 1838, at least, and its merits have been at various times described in the Medical Journals. It has not, however, received that attention at the hands of the profession that its importance demands. The introduction of hæmostasis into the list of remedies for the treatment of disease, was the result of an impirical or necromantic method which has been recommended for the treatment of intermittent fever. The idea was prevalent at one time, and may be, to a certain extent, at the present day, that disease might be removed from the body by the working of charms. Of that character nothing was supposed to be more efficacious in relieving the subject of all the ills with which he might be affected, than the skin of an eel. Hence it was often brought into requisition by the workers of charms for the eradication of all kinds and classes of diseases. Epilepsy, chorea, phthisis, scrofula, fever of all varieties, were cured by the wonder working "eel skin." For the cure of intermittent fever the "skin" was recommended to be tied around both arms, just before the arrival of the expected chill, and in a majority of cases it gave relief.

This fact attracted the attention of Dr. T. H. Buckler of Baltimore, and he, not being inclined to believe in the efficacy of charms alone, instituted an inquiry to ascertain if possible the action of the necromantic usage. On examining the arms of a man who had been using the "eel skin charm" for some time, he found the superficial veins which were of very large size, remarkably swollen from the complete obstruction of the venous circulation. It then occurred to him, that the prevention of the return of the chill was owing to the retention of the blood in the extremities by which it was withdrawn from the general circulation, preventing its accumulation in the internal organs. He immediately set about experimenting, the results of which were his recommendation of its use in the following conditions.

1. "To prevent hæmorrhage resulting from rhexis, diapedesis, or from wounds inflicted on blood-vessels.

2. "To relieve inflammatory engorgement in parenchymatous organs or inflammations of membranous tissues.

3. "To remove simple vascular congestion, and restoré the ballance of the circulation."

The effects which follow the application of the ligature to the extremities are:—first, the enlargement of the veins, which appear as if about to burst; the blood being continually supplied to the limb is forced into the veins by the capillary circulation, and being prevented from returning by the ligature, is effectually, for a time, removed from the circulation. The operator is thus enabled to take from the blood circulating in the internal organs a quantity much greater than he would dare remove with the lancet, and that too without injury to his patient. Here we obtain one of the most powerful depletives ever recommended or used by the practitioner. If the ligatures be retained the patient will complain of a peculiar tingling, stinging sensation in the limb, and pain along the nerves. Soon the skin becomes red and livid from the excessive injection of the capillaries, and the pulse gadually lessens in frequency and force. Under some circumstances the effects are much more extensive, a copious perspiration ensues, a peculiar feeling is experienced in the head as that of approaching syncope, and the individual complains of weakness and nausea.

The effects following the application of the ligatures, will be observed to be in a direct ratio to the quantity of blood in the circulation. In applying hæmostasis to a healthy, plethoric man the effect will be but partial. The reason of this is apparent. The vessels of the extremities are already filled to their utmost and the quantity of blood which can be withdrawn from the general circulation by distending the veins, is very small compared with the whole amount in the body. If the individual be anæmic, or one from whom has been drawn a certain quantity of blood, or been debilitated by excessive catharsis or emesis, the effects of hæmostasis will be marked and decided. The vessels of the extremities in the latter case have already been partially emptied of their blood, rendering them capable of receiving and holding not only enough blood to fill them to the healthy standard, but also the additional amount which may be forced into them by over distention. Of what advantage is this remedy in the treatment of disease? It influences directly the action of the heart and the circulation. It controls the heart's action without depressing the vital forces, or giving rise to any of those distressing consequences which so often follow the protracted use of most of the sedative medicines.

An individual after indulging in the excess of a midnight revel, is exposed the remainder of the night to the tender mercies of a winter's storm and in the morning is attacked with an acute inflammation of some internal organ. The physician is called, and what shall he do? One says, bleed him. Will it cure him? No: but says its advocate, the syncope which can thus be induced may enable the increased capillaries in the inflamed part to assume their natural calibre, and when consciousness returns the blood in the general circulation will have been so reduced by the operation that the organ will stand a fair chance of escaping a second congestion. But is this so? The quantity of blood that can be removed before the intervention of syncope is very small, and its place in the blood vessels will be filled by the other fluids of the body so quickly that very little if any advantage, will be obtained, and in twelve hours the patient is even worse than before. Common sense says, venesection will not do in this case. Another advises a cathartic. But his stomach is so irritable that it will immediately reject the nauseating drug. Suppose hæmostasis be now applied, what is the result? A large quantity of blood is removed from the central parts of the body; the action of the heart becomes less labored; the pulse is soft and compressible; the inflamed structure is deprived of its excessive supply of blood; the pain ceases, and soon the patient passes into a state of syncope which can be prolonged at the will of the operator.

The capillaries in the diseased organ can now assume their normal size; and the amount of blood taken from the general circulation being much greater than in the case of venesection, it is not so readily or quickly replaced by other fluids. When the syncope has been prolonged for a sufficient length of time, the ligatures may be gradually loosened allowing the blood to return by degrees, until consciousness is restored, when they may again be tightened if necessary. Certainly a remedy by which the circulation can be so effectually controlled is one of no small importance to the practitioner.

In pneumonia, hæmostasis is a most valuable agent, and many cases may be entirely cured by its application alone. In surgical operations the hæmorrhage may be in a great measure prevented by the application of ligatures to the extremities. Hæmoptysis and epistaxis may be readily arrested by the same means.

For the relief of vascular congestions of the brain, or lungs, hæmostasis is an excellent remedy, but its application indiscriminately, to all kinds of congestion, may occasion more harm than good. If, for instance, the ligatures be applied to the lower extremities when an abnormal quantity of blood existed in the inferior vena cava or its larger branches, instead of diminishing the congestion, it would be increased, and for this reason, the blood from the vena cava would have to pass to the heart, around the pulmonary circulation, and again through the heart before it could get beyond the ligatures, and in the application of the ties the blood in the vena cava would be deprived of a large share ot the force which ensures its return through the vein to the heart.

In the use of this remedy in intermittent fever, if the blood be detained in the extremities, *anticipating* a chill, and thus preventing its accumulation in the central organs, the attack may be prevented; but after the blood has been driven from the peripheral to the central and larger vessels, the application of the ligatures can not fail to increase rather than diminish the congestion.

Many years since, Dr. Parry recommended compression of the carotids for the cure of nervous diseases. He cited many cases in which it proved successful. Especially was this observed in hysteria, in which the symptoms were sensibly relieved during the continuance of the pressure. It is not at all improbable that the relief which followed this treatment was in those instances, obtained not because of the compression of the artery by which blood was prevented from entering the brain; but because by the compression of the jugular vein which must inevitably have taken place, the blood was *prevented from returning* from the brain. In hysteria, congestion often occurs in the lungs as is proven by the dyspnœa which frequently accompanies hysterical seizures, depriving the brain of its natural supply of the circulating fluid, and hence the advantage following the arrest of the returning blood from the latter organ.

An old and popular remedy for the relief of syncope was the application of ligatures to the extremities, but they, differing from hæmostasis, were intended to arrest the flow of blood *into* the limb, and retain it in the central organs instead of the extremities.

A POST MORTEM.

BY J. AYRES, M. D.

I read in the College Journal for March, a case of polypus in the heart, which I regard with much interest, and still more, the remarks upon the same. I have been the more interested in the case because of a somewhat similar one occurring in my practice, which I send you.

I was called Feb. 24th, to see a Negro girl, aged 10 years, belonging to R. E. Found pulse feeble and quick, respiration hurried and difficult at times, abdomen swollen and dull on percussion, except in the umbilical region, where it was resonant. She had dysentery, which set in about three days previously; countenance sallow, skin husky, limbs emaciated and cold; but she still continued to have a good appetite.

I ascertained she had been puny for about a year; was taken worse about Christmas, had suffered no pain up to that time, and suffered none then except from the dysentery. Was treated from about Christmas, by Dr. C. who pronounced her disease, ascites. Just before Dr. C. was called, her mistress gave her worm medicine, and expelled some worms. But, notwithstanding their treatment, she continued to get worse.

I tried to arouse a healthy action of the skin by warm baths, gave stimulants and tonics, and aimed to overcome the dysentery, by internal remedies and injections; but all was of no avail, and at my third visit, I assured her Mistress that the girl must die, and requested a post portem examination, as soon as death occurred, which was granted.

I laid the body open from the superior part of the sternum to the os pubis. Found extensive adhesions of the organs and membranes of the abdominal cavity; the liver and diaphragm were grown together, the upper and left surface of the stomach were firmly adherent to the diaphragm, and the right end of the liver and left end of the stomach, were grown fast to the walls of the abdomen. The folds of the bowels and membranes were so firmly attached that it was impossible to separate them, except with the scalpel; they were also adhered on all sides of the abdomen. While separating these adhesions I found the external surface of the organs and membranes studded with patches of small white tubercles, about the size of wheat, and of a hard consistence.

But I wish to call particular attention to the fact, that when I cut the ascending aorta I found in it, close to the semilunar valves, a white viscid deposit, of a fibrinous character, and about one and a half inches long, and one third of an inch in diameter. Did this deposit cause the above disease, by obstructing the circulation? Is it probable that any remedies would have benefited the case, when first taken? If so, what would have been the proper treatment?

ANKYLOSIS OF THE KNEE AND ELBOW JOINTS.

BY PROF. A. J. HOWE.

Ankylosis is a term used to designate an articular affection, which is characterized by the partial or complete immobility of a joint. By true or complete ankylosis is understood that condition of an articulation which follows extensive destruction of the articular cartilages by ulcerative disease, new osseous matter being thrown out in such quantity as to produce firm adhesion between the opposite denuded surfaces. There are some variations in the process by which this state is reached, yet the result is *complete immobility*. In many instances there may be a bridge or splint of bone extending across the articulation, or several of these, or a shell, like a hollow cylinder, thrown out which encases the joint.

False or incomplete ankylosis is that state of an articulation in which there are firm bands of fibrous tissue, organized under the influence of pathological action, extending from one bone to another, or are blended in the ligamentous structures surrounding the joint, producing a tense unyielding mass. This soft union does not prevent all motion, the joint being merely stiff and not susceptible of movement through the entire changes naturally given to it.

The adhesive or false bands may be *within* the natural capsule of the articulation, or *outside* of it, or as just announced above, blended or intermingled with the normal tissues of the capsule itself. The more external the disease, commonly the more susceptible of cure it is. Thus, if the rigidity be occasioned by some lesion of the ligaments, deep fascia, or synovial membrane, though curable, if taken in season, is exceedingly prone to result in osseous ankylosis. The extra capsular difficulty rarely terminates in complete immobility, and can generally be cured.

Ankylosis is to be considered rather the result of some disease, accident, or defect, than the manifestation of an active morbid process. There are certain diseases of the joints that terminate favorably only by ankylosis, and the treatment is directed with this end in view. To undertake to perform a cure, then, in cases of an incipient ankylosis without ascertaining the causes of the deformity, would indicate a negligence of pathology which is everywhere characteristic of the charlatan. Ankylosis most frequently affects the ginglymoid joints, the knee and elbow from the extent of their articular surfaces, oftenest suffering. Any articulation may be the seat of inflammatory disease, the synovial secretion diminishing gradually, or becoming plastic or adhesive in character, until false tissues form and impede motion. The most common cause of ankylosis is absolute rest in a given position. Striking examples of this may be found among the *Fakirs* of India, a class of Priests or monks, who, actuated by religious motives, condemn themselves to maintain a limb in one position until it will take no other. But more familiar examples may be found in advanced stages of fracture, luxation, or sprain, the limb having been restrained by the dressing which held it in a certain position for too long a period. Every neighborhood can furnish an example of ankylosed deformity from the above causes. All fractures near joints are more or less liable to result in this difficulty. No unfrequent cause of it is the use of an *immovable* dressing in the treatment of fractured injuries. Another cause, and I am afraid too often justly censurable, is a faulty diagnosis of some of the injuries common to the limbs.

Frequently a practitioner of medicine, who has never been in a medical College, or made a careful investigation of the mechanism of the human body, is presumptuous enough to attempt the most dangerous of all surgery, the treatment of a limb that may be fractured, dislocated, or sprained, or may be suffering from a combination of these lesions. Who has not known a broken condyle of the humerus treated for a dislocation of the head of the radius, or severe sprain of the elbow-joint, with partial or complete ankylosis as the result.

From the great strength of the knee-joint it is not so liable to fracture, and, consequently, to the stiffness which follows such lesions, as the elbow; but from the peculiar construction of the former articulation, the extent of its articular surface, and the amount of its articular material, it is more subject to accidents and diseases that result in ankylosis, than the latter. All inflammatory difficulties of the knee, must be treated by *rest*, yet this very inactivity is *sure* to result in rigidity of the tissues. The friction or stimulation excited by motion in a joint, is necessary to the normal secretion of the synovia. To have the movement of a joint restrained by weak bands of organized plastic lymph that is sometimes exuded during a slight attack of inflammation, may lead to the establishment of a union that could not well be broken up in after years, so liable to complete ankylosis is the fixed or immovable state of a joint.

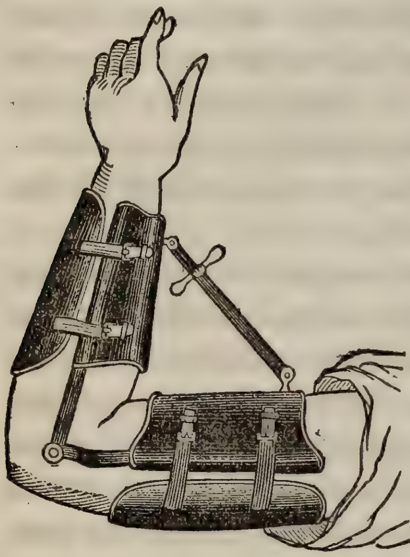
It is to be borne in mind in the management of difficulties that are likely to result in ankylosis, that simple synovitis may terminate in arthritis, one tissue being attacked after another until the entire structures of the part are involved. Although the history of the case will assist much in making out the diagnosis, much is to be determined by the actual state of the parts. In false ankylosis I have seen the limb as rigid as in the true, but in the latter the patient feels a jarring when the limb is struck, or brought to the ground heavily in walking, and he dreads these shocks; if the limb be twisted with great force and no motion is produced, nor pain elicited, the muscles and tendons about it being scarcely moved, it may be pretty safely concluded that true ankylosis is present. Much will depend upon a correct diagnosis, for nothing but disappointment could be the result of treatment suited to soft ankylosis if it were applied to the osseous variety. The condition of the patient, whether scrofulous or otherwise, will have a bearing upon the case. It is not certain, because there have been fistulous openings about the joint which have discharged fragments of cartilage and bone, that the union following such a state extends throughout the articulation, rendering it complete. In many cases where abscesses have formed about the joints, even the articular cartilages having suffered at some point by the ulcerative process, so slight is the unnatural union that it may be easily broken up.

A very frequent cause of stiffness of the knee-joint is rheumatism; an attack of which may come on from a slight cause. In those predisposed to rheumatism a gonorrhœal infection will be sufficient for an exciting cause, especially if the patient use too strong injections. Some persons have such an irritable constitution that the injection of cold water into the urethra, even when that canal is in a state of health, would excite rheumatic pains, or symptoms of irritative fever. Much has been written about gonorrhœal rheumatism, by which the impression is generally current that the virus of the disease becomes constitutional, then localizes itself upon the knee or other articulation. The impression, too, has been strengthened by the fact that the urethral discharge ceases or diminishes upon the onset of the articular disease, and comes on again profusely as soon as the joint or rheumatic affection subsides.

Treatment of ankylosis of the elbow-joint.—In a case of ankylosis of the elbow-joint, the defect being brought about by inflammatory action, and not by dislocation or displacement after fracture, the patient should be put fully under the influence of an anæsthetic, when the arm may be seized above and below the elbow, and powerfully flexed and extended to break up the organized lymph and false bands that have formed about the articulation. To do this effectually requires strength and expertness. If the surgeon falter in the least, the adhesions will prove too strong for him.

The adhesions having been broken up in this way, the limb is to be subjected to absolute rest for a few days, and treatment calculated to keep down inflammation,—such as fomentations and cold infusions of anodyne herbs—when passive motion is to be practiced to prevent a recurrence of the ankylosis, a state the limb is pretty sure to reach if left to itself.

Frictions upon the surface are to be used, and to satisfy the patient that all is being done that well could be, electro-galvanism, the vapor bath, and stimulating and anodyne liniments are not to be neglected. The presumption is that such agencies have a good effect apon an ankylosed or stiffened joint, but whether they really effect much I am not prepared to say. In cases where the ankylosis is very firm, though not absolutely bony, and the motions of flexion and extension are those principally impeded, an apparatus like the one in the diagram which is a modification of the screw of Stromeyer, may be resorted to. With this the limb may be gradually but forcibly flexed or extended. The screw is to be turned daily a thread or two, until the position of the limb is changed, and then its action must be reversed, the arm being gradually flexed or extended, finally passive motion by the hands of a good assistant is to be practiced several times a day. The use of the warm bath, friction with oleaginous, stimulating and anodyne mixtures, and electro-galvanism, may assist in the removal by absorption of any deposits of plastic lymph that may be effused into the cavities and areolar spaces about the joint. The pressure upon such accumulations that may be effected by the long continued efforts at flexion and extension, will stimulate the absorptive process; and under such efforts the joint may be expected to improve in motion and pliability. Such treatment is to be persevered in for many months, it being difficult to determine when the efforts cease to exert a remedial influence.

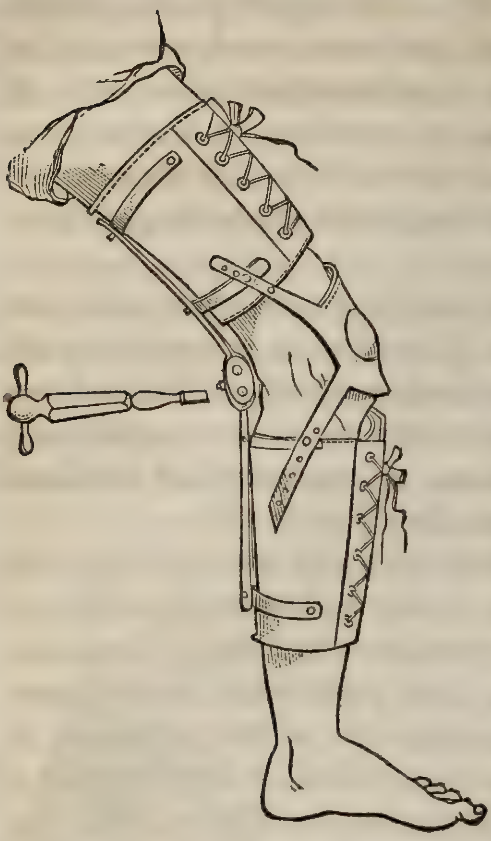


If the mechanical measures recommended above, fail to accomplish as much as they should, on account of a rigid contraction of the fascia, this barrier should be divided with the knife. The points of resistance having been ascertained by manipulating the parts, a tenotome or small scalpel is to be introduced between the skin and fascia, just as in the operation for club-foot, then turned upon its edge, when it is made to cut the resisting tissue from without inwards. Only a small puncture is made, which is to be closed immediately with adhesive plaster, so that the wound scarcely complicates the difficulty. The apparatus may now be made to set the joint at any angle, yet the forced movements must be conducted with care, lest a high grade of inflammation be excited. It must be borne in mind, too, that there is a tendency to relapse in the treatment of such cases. This is to be resisted by continuing the use of the screw, and passive motion until the tissues about the joint have resumed their natural state.

In cases of complete osseous ankylosis nothing short of resection can be expected to effect anything. And if rotation be preserved to the arm, it would be best to let the arm alone, especially if the limb was ankylosed at such an angle as to permit the hand to be brought to the face. The movements of the scapula are so extensive that the hand has quite a range of motion, even when the elbow is stiff.

Ankylosis of the *knee* is to be treated upon the same principles as the same defect confined to the elbow. It may be fomented, galvanized, vaporized, and unguented until all interested are convinced of the inutilitly of such measures in some cases. And quite often the treatment recommended by the old "grannies" in and out of the profession, is quite ludicrous. Bell advised the limb to be folded in the omentum of a sheep; Boyer speaks favorably of introducing the affected joint "into an opening made in the belly of an animal recently killed, keeping it some time among the warm intestines." Others have recommended plans equally absurd. Quite a favorite prescription among the "wise" in such matters, is the "oil of angle worms," which is reputed to possess *powerfully relaxing qualities.* But all such nonsensical prescriptions are only mentioned to indicate the ignorance and superstition that have prevailed in a by-gone age, although it would not be surprising if a variety of such notions still existed in some benighted regions.

In a case of recent ankylosis of the knee, let the patient be put under full anæsthesia while the articulation is rendered free by breaking up the adventitious bands which hold it fixed. Strength and dexterity will often be required to do this, yet it should be done in cases where ankylosis is necessary to the cure of some long standing disease. If the attempt succeed, the limb is to be rested and fomented until all danger from inflammation has passed, when passive motion, friction and baths are to be persevered in until a cure is affected. After a forced rupture in cases of spurious ankylosis, an apparatus like the one seen in the diagram may be used. This will hold the limb at rest in a given position. It is astonishing how little inflammation is commonly excited by operations of this kind, even where false bands, contracted fascia, and tendons have been divided with the knife.



When the adhesions are being broken up the crackling is often quite startling, yet little is to be feared, if the forced motion be in the direction of flexion or extension. The parts that yield are not the normal tissues, but the spurious connections. Anodyne and evaporating lotions soon allay the temporary irritation and excitement. Sometimes a starched bandage will be all that is required to keep the limb at rest. This repeatedly applied can be used to set the knee at various angles while the process of cure is going on.

In cases of ankylosis not suited to the breaking up methed of treatment, gradual extension and flexion can be produced by means of the screw apparatus, which is to be managed in the same way as the instrument advised in the treatment of the arm.

The hamstring tendons must be cut when they are rigidly contracted, so must any rigid adventitious bands that resist rupture or the action of the apparatus.

Resection of the knee-joint, unless as practiced by Dr. J. Rhea Barton, of Philadelphia, in cases of bony ankylosis, would not be justifiable. Dr. B. took a wedge-shaped piece of bone from the femur just above the condyles, and straightened the limb. Such an operation might be desirable in a case of ankylosis where the leg stood at a right angle to the thigh; yet it is not to be advised in cases of a very obtuse angle at the knee.

Amputation has been performed to get rid of unsightly and immovable limbs. Such operations have been performed mostly by French surgeons. In private practice few cases of the kind would be permitted.

Females affected with hysteria sometimes complain of a difficulty of the knee, and pet the limb so much, that it actually becomes rigid. The stiffness arises in part from loss of motion, and in part from spasmodic muscular contraction. The complaint is to be treated by overcoming the hysterical state with suitable constitutional remedies; and friction, electro-galvanism, and water douches locally. Exercise and diversion of mind assist in the process of cure.

EDITORIAL DEPARTMENT.

NATURAL AND ACQUIRED FITNESS FOR THE STUDY OF MEDICINE.

There must necessarily be a constant accession of young men to the medical ranks, to take the places of those who, to engage in other pursuits, leave the profession, or are removed from it by death. There is also a demand for medical men created by the vast increase of population, and the spread of civilization into hitherto unoccupied regions.

This demand for physicians has been supplied not only by the establishment of colleges to correspond with the regular and legitimate growth of the country; but, to the detriment of all, ambitious individuals, desiring the notoriety naturally attendant upon the connection with a medical institution, have started more of them than could receive adequate support. The competition which this state of things naturally produces, has led to invidious remarks and comparisons, and even manifestations that ill become dignified bodies. It has led many to suppose there is a degree of antagonism existing between those engaged in teaching, which has led rival schools to send out men totally unqualified to practice in the profession of medicine. Especially has this spirit of condemnation been entertained by old practitioners who find inefficient and incompetent graduates settling in their midst.

On account of these charges we would have the different members of the profession consider whence originate such difficulties. Who first encourages a young man to engage in the study of medicine? Is it not the physician who takes the student into his office? Physicians can and should know more of young men whom they may receive as pupils, than can be known of them by the Professors when these tiros present themselves for matriculation. Although the Trustees and Faculty of any College may be disposed to exercise much discrimination in the selection of a class from those who present themselves for collegiate instruction, yet the ability and education of a young man cannot, from a brief acquaintance be determined so accurately as could be by the preceptor who has had much more extensive intercourse with him.

Besides, for the sake of the numerical advantage, the rivalry existing between the several Colleges often leads to matriculation of students who would injure any institution. This inordinate desire to secure the largest classes has done the profession an infinite deal of mischief; and the fault has been as just now suggested, as much with the profession at large, as with the Colleges. To be sure, the Colleges can withhold diplomas from those who manifest any degree of incompetency; yet once a student of medicine in a physician's office, and a matriculant in a medical college, the mere withholding of a diploma will not prevent an individual from practicing medicine in this free and growing country.

With the preceptor, then, rests the responsibility of furnishing recruits to the medical profession. By each practitioner this duty of inviting young men to engage in a course of medical study which is about sure to result in an entrance to the profession, is worthy of the most profound consideration. Though each feel the weight of this responsibility, while there exists so great a demand for progressive and well qualified medical men, let no one fail to look about among his friends for such young men as are eminently fitted by nature and acquirements, to enter upon the study of medicine. In almost every community there are those who by suitable advice and encouragement would prepare themselves for this honorable career.

In regard to the fitness of an individual by preparatory education, for the successful study and practice of medicine, there seems to be quite a diversity of opinion. Many of our older Western practitioners entered upon their professional labors without any classical training, and some even never enjoyed the benefits of academical study. That they have succeeded well in practice no one will attempt to deny; yet if they had been trained not only to *collect* facts, but to *compare*, *abstract*, and *generalize*, or even to treat a topic skilfully by the principles of the inductive or Baconian philosophy, they might have exercised more influence in their sphere of action, and left something intelligible for the instruction of those who were to come after them.

In regard to the ancient languages being a pre-requisite to matriculation in a medical college there has been considerable discussion. Some journalists have declared that the study of the classics tends to exercise the mind rather upon *words* than *ideas*, and to wed it to the modes of thought peculiar to the *past*. Others contend, as no other profession or pursuit has brought into every day use the Latin and Greek languages, that the student of medicine ought above all others to have a practical acquaintance with them. The common medium of medical knowledge was once the Latin language; and all technical terms in science are now taken from it, and its more polished predecessor, the Greek. To understand the etymology of these terms, and the languages in which they are cast, is an accomplishment that well becomes the medical man. All these advantages of philology we would not despise nor underrate, yet the mere ability to pass an examination in the Roman and Greek languages, does not argue that the possessor of a smattering of these tongues, is intellectually, morally, or otherwise fitted to engage in the study of medicine. Sometimes the ancient languages are cultivated to the exclusion of studies which more effectually unfold the mental faculties. To make a superficial knowledge of the Latin and Greek Grammars and Readers the standard by which students are to be admitted to medical colleges, would be offering a prize for an object which would be gained by neglecting something more valuable. Besides, the most accurate of medical literature is now in modern language. If not written in *English*, it is soon translated into the tongue which is rapidly becoming universal.

In regard to legislation upon the subject of professional membership, we think very little can be profitably done. Certain presumptuous medical writers a hundred years ago, were harping upon the same subject; and it is to be expected that those who would be considered leaders, or directors in such matters, will continue to amuse themselves with these futile endeavors.

The most effectual method of exterminating medical pretenders, is to educate and elevate the people that they may be able to discriminate between the spurious and the real physician. Often those who complain the most bitterly of charlatanry, fail to see the true cause of it.

The people whose voice gives force to law, must discover an appreciable superiority of the physician over the medical mountebank before they will legislate in behalf of the former. The people are always jealous of parties who are likely to abuse power voted to them. Let any sect or clique in medicine obtain legislative authority to control those who would engage in the study or practice of medicine, and all others would be in danger of losing their rights. The spirit of intolerance and illiberality now exhibited by the dominant party clearly indicates what might be expected from that source, should its leaders succeed in what they so much desire, and natural fitness and merit would not weigh in their impartial balance; aristocratic rank, favor, and city notions of professional attainment alone could dip the beam.

Members of the bar and the pulpit are not expected to be so well qualified to practice their professions in a pioneer life, as they would necessarily in be large cities, in order to sustain themselves amidst an active competition. To fix upon an unvarying standard of acquirements to be attained before entering upon any kind of professional practice, would be incompatible with the spirit and growth of our country. All of these conditions are beyond the control of conventions and associations. As soon as the medical student is convinced that dialectical, classical, and other acquirements will be necessary to ensure an influential position in the community in which he is to labor, and a respectable standing in the profession, then will he prepare himself accordingly. And any attempt at coercion in these matters, on the part of those who would be professional dictators, will result to their disadvantage. The proportion of the liberally educated, of those who attend medical lectures, yearly increases. And the time undoubtedly will come when nearly all who present themselves to medical colleges for matriculation, will possess a high degree of mental culture. The demand for highly educated medical men is increasing, and will continue to increase; yet, until such men can be furnished, the necessities of our growing country will compel the people to accept such services as they can for the time command.

BOOK NOTICES.

The Transactions of The American Medical Association; Instituted, 1847. Vol. XI, 1858.

The Eleventh Annual meeting of this Association was held in Washington last May, and the Committee of Publication give as a reason for the late appearance of the volume of proceedings, that "the delay in the appearance of the present volume was unavoidable. Every effort that was made to secure prompt and early publication was frustrated by delay in returning proofs that were sent to different points for correction." But we feel no inclination to cast censure on any party. The size and character of the book would excuse even a greater delay.

We have read with great pleasure, the preceding volumes of the Transactions, but do not think any former one equals in value this eleventh and last. In some of the doings of this body, there have been errors committed which are deeply to be regretted, and others attempted which cannot meet the approval of independent, thoughtful men; which errors have been freely and forcibly commented on by editors and contributors to Medical Journals from time to time, and some of which will doubtless be corrected hereafter. But all associations are liable to fall into the error of attempting to legislate upon subjects beyond their control.

The annual volume of Transactions, have given as clear and truthful an account of the progress and position of the profession in America, as could well be presented, and in that regard are exceedingly interesting. But like all organizations it is *conservative*, and hence has not reflected that spirit of progress which has ever been manifest within the profession, and has *pushed* the more fogy and unprogressive along in spite of their own inertia. As the more independent physicians are not represented by this body, those who are desirous of becoming acquainted with *their* history cannot obtain any satisfactory account of them or of their views from this publication.

Without attempting to give an analysis of this volume, which its size, and the great variety of its contents forbid, we will briefly say that it contains the Minutes of the Meeting of the Association, Addresses etc., and Reports on Epidemics in several States, and on a dozen other subjects, with papers, letters, and Prize Essays, together with a reprint of the famous "Code of Ethics" which had been partially forgotten by many who claim to be its most strenuous supporters. It is an interesting and valuable publication.

The Physcian's Pocket Day Book, Visiting List, Diary, and Book of Engagements for 1859. Philadelphia; C. J. Price & Co., 1859.

This is a very convenient book, and admirably answers the purposes indicated in the title. It, however, must prove less acceptable to the country than to the city practitioner as for the latter it was evidently specially designed.

Annual of Scientific Discovery: Year Book of Facts in Science and Art, 1859. Exhibiting the most Important Discoveries and Improvements in Mechanics, Useful Arts, Natural Philosophy, Chemistry, Astronomy, Geology, Zoology, Botany, Minerology, Meteorology, Geography, Antiquities, etc. Together with Notes on the Progress of Science during the year 1858, A List of recent Scientific Publications, Obituaries of Eminent Scientific Men, etc. Edited by David A. Wells, A. M. Boston; Gould and Lincoln, 1859.

From the above explicit title-page it is readily seen that the design of this work is one of vast usefulness. The year book for 1859 comes richly stored with interesting and valuable truths freshly culled from nature, by the vast number of busy scientists who are unceasingly demanding a knowledge of the hidden and the unknown. To all who feel a desire to keep pace with the development of truth in regard to the physical, whether confined to the applied science, or expanding through space to distant worlds, the yearly visits of this annual will be most welcome.

EDITORIAL ABSTRACTS.

Infantile convulsions.—Dr. Ward writes: "In the College Journal for January last, there is an article on Infantile Convulsions, containing much with which my opinions entirely accord, but I question the propriety of using chloroform, as that only suspends the convulsive movements for the time, without removing the cause."

Last fall, during the prevalence of bilious remittent fevers, he had occasion to treat several cases of convulsions among children. He supposed the convulsions to be caused by excessive febrile action; and he resorted to the use of cold effusions, followed by cold sponging of the surface for the purpose of reducing the heat and fever. He usually by these means succeeded in arresting the convulsions in five minutes. By keeping the surface cool, the convulsions did not return. He considers the cold effusions applicable to those cases only where there is excessive vascular action.

Nitrate of Potassa in Asthma.—Perhaps no one remedy has been prescribed in severe cases of this distressing disease with more general success than the following: Immerse thick porous paper in a solution of nitrate of potassa, or common saltpetre, and hang it up to dry. At the approach of a paroxysm, allow the patient to inhale the vapor by burning it in the room, or smoking it in a tobacco pipe. We have several times prescribed it, and in a majority of cases the relief it afforded was most magical. The solution of nitrate of potassa should be a saturated one; and after the paper has become dry it would be well to immerse it a second time. A very good plan of filling the room with the vapor, is to roll up a sheet of the proper size and place it in a candle stick. Ignite the end, and it will burn gradually and the vapor will be diffused throughout the room. It is easily obtained and well worthy a trial.

An Elegant Sticking Plaster. We give the following formula for plaster for dressing wounds of almost any character. It is much neater than the common adhesive plaster, and may be made by any one at trifling expense. Dissolve ʒss of Benzoin in f℥vj of rectified spirit; in a separate vessel dissolve ʒj, of Isinglass in water; strain each solution, mix them, and let the mixture rest, so that the grosser parts may subside; when the clear liquor is cold, it will form a jelly. Take a piece of black or flesh colored silk, stretch it over a frame or other apparatus fitted for the occasion; warm the solution and apply it to the silk with a brush ten or twelve times. To prevent its cracking, it may be finished off when it is quite dry with a solution of ʒiv of chian Turpentine in f℥vj, of tinct. Benzoes.

Chloride of Zinc liquified by exposure to the air has been recommended as an excellent remedy for calming dental pain. It may be applied with a common camel's hair pencil to the cavity of the aching tooth. Before applying, the tooth should be surrounded with cotton wadding, and when the chloride has been introduced, it is well to fill the cavity with this same cotton. Then wash the mouth with a little warm water.

Tannic Acid.—Nævi.—Dr. Quinlan was called to treat a girl nine months old, who had a subcutaneous nævus on the left cheek between the mouth and the angle of the jaw. At birth it was scarcely perceptible, but had increased to about an inch in diameter. The skin was punctured with a cataract needle, and then by means of a syringe, an injection of a solution of tannic acid of the strength of a drachm to a fluid ounce of distilled water, was made, until the nævus was fully distended. The fluids quickly coagulated, and the tumor became nearly as hard as stone. Inflammation followed, and on its subsidence, the nævus had disappeared.

For Baldness—The following has been found useful to prevent the hair from falling off, and to cleanse it of dandruff, and is beneficial in restoring the growth of the hair in many cases of baldness. Take of caster oil, half a pint, neutral spirits, half a pint, strong aqua ammonia, three fluid ounces, tincture of cantharides, one fluidounce, oil of bergamot, half a fluidounce; mix. Rub the scalp well with a stiff hair brush each time before applying the mixture; to be used once a day. It usually occasions considerable smarting for the first five or six applications.

Diuretic.—Dr Blythe says: The pods or bulbs of the common string bean, (*phaseolus vulgaris*,) made into an infusion and drank freely, have been found to act upon the kidneys when copabia, nitre, etc., have failed. The infusion has proved very valuable in inflammation of the mucous coat of the bladder. The pods may be dried and kept in a closely stopped vessel, for use during the year.

Liquor Sodæ Nitrici.—Dr. Miller writes that pure Nitrate of Soda is one of the best remedies known in local rheumatism, and in inflammation of glands. Theinemann stated in 1849, that it is superior to mercurial ointment in all regards, and not liable to produce the unpleasant results that follow the use of mercury. Rademacher made it thus:

℞. Nitrate of Soda, pure, ℥j.
Water, pure, f℥ij. M.

Nitrate of Soda is now being used somewhat extensively in Philadelphia, and other places in the east.

Pertussis.—Dr. P. J. Hynes treats hooping cough by first administering an emetic or two, then an active aperient or two, keeping the patient on a non-stimulating diet, and giving enough of the tincture of cantharides to keep a mild form of stranguary for a few days; in the course of six or seven days the patient is cured. Roche's embrocation may be used in conjunction, if required.

Colliquative Sweating.—Tannic acid dissolved in elixir vitriol, or in dilute sulphuric acid, forms a very beneficial combination in colliquative sweating, or in chronic forms of diarrhœa.

Chlorate of Potassa has been found very useful in inflammatory and ulcerative affections of the mouth; the dose for a child one year old is five grains; for an adult twenty to thirty grains, three times a day. According to Dr. Speer it acts as a sedative to the nervous system and circulation in certain pathological conditions, as a stimulant to the digestive organs, increasing the saliva, and causing an augmented flow of bile, and in large doses is a moderate stimulant to the urinary apparatus. It also acts as a stimulant and beneficial alterative to the mucous tissues, increasing their secretions.

Fœtid Perspiration from the feet, is removed by bathing the feet every night in a strong solution of carbonate of soda.

Itch cured in half an hour.—Boil one part of quick lime with two parts of water, until dissolved. Wash the body with warm water, and then rub in this solution for half an hour. It is only needful then to wash the body well, and to use clean cloths, as the ocarus will be killed, and the cure complete. Or, wash the body with soap and water, and afterwards with a solution of sulphuret of calcium, rubbing this in for half an hour each time; use this three times night and morning, and then bathe the body well with soft soap and water. Frequently the first application will complete the cure.

To arrest the secretion of Milk.—Smear the extract of belladonna on tne areola of the breast. Nothing can have a more pleasing effect than it generally has in relieving the pain and arresting threatening abscess.

Uterine Hemorrhage after Delivery.—It is quite uncommon for uterine hemorrhage to take place several days, or even weeks subsequent to delivery; but such cases occasionally occur.

Dr. Ferguson reported a case in the *New York Journal of Medicine* in 1850 where the hemorrhage took place two weeks after the woman was delivered.

Dr. Stimson reported a case in the *New York Annalist* for 1847, where the hemorrhage appeared on the tenth day after parturition.

Dr. Kunkeler reported a case in the *Americo-Chirurgical Review* for Jan. 1859, of a case where the hemorrhage occurred twenty days after confinement. Another case occurred in his practice in 1857, when the flooding occurred on the eighth day after delivery.

Veratrum Viride—Dysmenorrhœa.—Dr. R. M. Ayres writes: "I gave a young lady, fluid extract of veratrum viride for irregular and painful menstruation, and she became very regular and much better every way." He wishes to know the experience of others with the remedy in such cases.

Sanguinaria Canadensis.—Dysmenorrhœa.—Dr. O'Conner has used various preparations for the cure of dysmenorrhœa, but prefers the tincture of blood-root to all others. He commences to have it used two weeks before the expected return of the menses, and gives a tea-spoonful of the tincture three times during the day, and a tablespoonful on going to bed, preceded by a warm foot bath.

The quantity used by him appears very large; but he says it only produced slight nausea, pain in the loins and hypogastric and iliac regions, extending down the thighs, which symptoms manifest themselves once or twice before menstruation is completely established.

Oxide of Zinc—Whooping Cough.—Dr. Hochsteler, thinks in large doses this salt, if its use be rigidly followed, will prove a specific. To infants, he gives from one to four grains a day, in repeated doses. To older children he gives it in proportionally increased quantities. From one to four weeks suffice to perfect the cure.

Twin Conception from a single Ovary.—In a paper recently published by Dr. B. J. Stowe, in the *New York Medical and Pathological Journal*, he narrates a case which demonstrates the idea that male and female embryos may spring from a single ovary, and at the same time. Dr. S. states that the lady had been affected with a serious disease of the left ovary for years; and that a short time before death she gave birth to twin children, the one male and the other female. A *post-*

mortem examination revealed a very extensive disorganization of the diseased gland. The sac of the morbid ovary—for it was the encysted variety of disease—had been emptied by paracentesis, some years previously, which proves the organ to have been unfit for producing ova long before this double conception. It was not a little remarkable that the woman menstruated regularly during the period of her gestation.

Glue.—Dr. Jewett writes that for the last two or three years he has used common glue in passive uterine hemorrhage; and that in no instance has it failed to give prompt and permanent relief.

For use, he has it dissolved in water, as for mechanical purposes, and gives a tablespoonful once in two or three hours.

Substitutes for Mercury.—Dr. Redd writes; "*I use no mercury.* You may be curious to know what a reformed Allopath does for a substitute for calomel in diseases of the liver. I use podophyllin, leptandrin and sanguinaria. In the absence of podophyllin and leptandrin I use sanguinaria Canadensis, and as a chologentic agent and general stimulant to the liver I find it every way superior to mercury, while it is entirely *safe*, and not obnoxious to the danger that attends the use of the mercurials.

I doubt if sanguinaria has its equal in the Materia Medica, as a stimulant to the glandular system. Its influence on those organs is greater than calomel; it is safe, and may be given for any length of time, as it produces no injury of a permanent character."

Sanguinaria as an Expectorant.—Dr. Redd makes a syrup as follows:

℞. Sanguinaria Canaden.,
Skunk Cabbage, āā ℥ij.
Ipecacuanha, ℈ij.
Hot water. Oj. M.

Steep and strain, and then add sugar enough to form a syrup. The dose of this is one teaspoonful once in two or three hours. When there is febrile or arterial excitement he adds some tincture of veratrum viride. When the cough is painful, a little sulphate of morphia in addition, is very useful.

This syrup of blood-root is also used by Dr. Redd in those coughs sometimes called *Liver consumptions*, where the difficulty is rather a disease of the liver than lungs, and yet the cough is very distressing. He thinks nothing of equal value to it has yet been found. He also is well pleased with the effects produced by this syrup in pneumonia.

Local Narcotic Injections in Neuralgia.—In the College Journal for May, 1858, we called the attention of our readers to the method recommended by Dr. Alexander Wood, of Edinburgh, of applying anodynes directly to deep seated painful points. Mr. Charles Hunter after making a series of experiments, has come to the conclusions:—

1. That by injecting a narcotic into a part at a distance even, from the point affected, relief will follow.
2. That no inflammation or abscess follows a single narcotic injection.
3. That the relief is sometimes almost instantaneous.
4. That the relief is more certain than when administered to the stomach.
5. That constitutional harm, with irritation, sickness, headache, etc., are thus avoided.

Mercury and Syphilis.—Prof. Loriuser in a lengthy paper discussing syphilis and the use of mercury in that disease, arrived at the conclusion, that:—Mercury whether given internally or applied externally, remains in the system many years. That the symptoms most commonly produced by a long sojourn of mercury in the system, differ essentially from those resulting from recent mercurializaion. That these symptoms are usually taken for those of secondary syphilis, but sometimes for those of gout; while very rarely has their true nature been understood. That the use of iodide of potassium will lead to the excretion of mercury, which may have lain in the system many years, and the mercury thus eliminated can be readily detected in the urine.

Chronic Mercurialization.—Some months since, Prof. Cleaveland was applied to by letter to treat a case of what had been called chronic rheumatism and ague. The lady who lived in central Illinois, in reply to queries, stated that some twenty years since, in her girlhood, she was treated with mercury to salivation.

Being guided by the symptoms detailed, and this information, he concluded the difficulties owed their origin to mercury still in the system; and to expel it he ordered the use of iodide of potassium in simple syrup —with sulphuric acid, each alternate week. Under the use of these agents, the lady has fully recovered from the unpleasant symptoms that have caused great suffering for half her life.

Belladonna in Incontinence.—Recently repeated cases have been recorded, of the value of Belladonna in Incontinence of Urine in Childhood; but Dr. Richard has also found benefit where there was incontinence of both urine and of fœcal matter.

He prescribed it internally in the form of syrup, and applied a suppository coated with belladonna in the rectum. The immediate relief experienced by the first patient led him to try it with four others, three of whom were much benefitted.

The prevalence of incontinence is much greater than many suppose, and any remedy which will cure the difficulty, must be hailed as a great boon. In the House of Refuge of Philadelphia where there are usually about 300 boys, over one-fourth is found to suffer from incontinence of urine, while a few have less than normal control over the sphincter ani. In families, the proportion who suffer from the disease is not so great, but by no means inconsiderable.

At Philadelphia, belladonna has been used, but in conjunction with other agents.

Fevers. Varieties.—Dr. Murchison, assistant physician to the London Fever Hospital, maintains that the class of continued fevers includes at least three, and probably four, varieties. 1st. *Typhus*, caused by a specific poison generated by human beings in over-crowded and unventilated spaces, and propagated by infection. 2nd. *Relapsing* fever, produced by famine, or destitution and starvation. 3d. *Typhoid* or *Enteric*, in all regards unlike typhus, and resulting from organic matter in a peculiar state of decomposition. 4th. *Simple* fever, or *fibricula;* non-specific, and non-contagious, arising from exposure, fatigue, surfeit, etc.

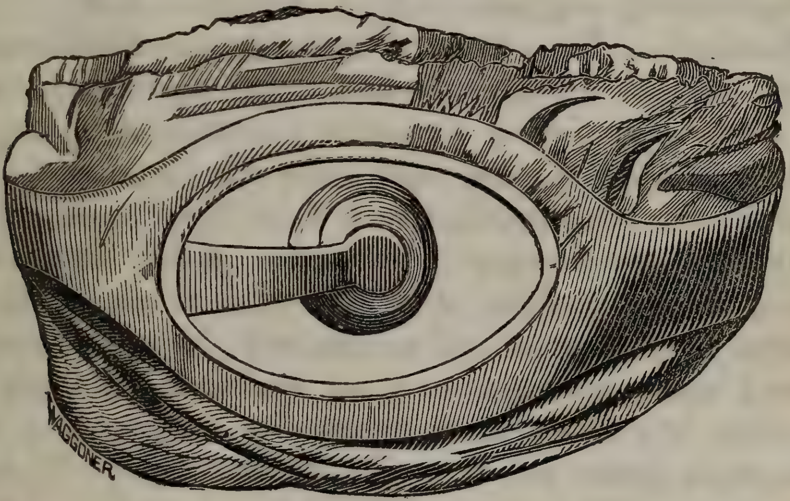
Coffee and Lemon Juice in Ague.—Von Holsbeck, recommends to infuse an ounce of roasted coffee in three fluid ounces of boiling water, and after straining it, add enough lemon juice to make it quite sour. This is to be taken at one dose some time before the expected chill.

Tincture of Iodine,—Syphilis.—Tincture of iodine is considered by M. Hervieux the best local application, at the commencement ot syphilis. In some persons, it causes terrible pain, amounting almost to intolerable torment, which may last half an hour. Even the worst form of the local disease, is usually cured in a week by the application of the tincture.

MISCELLANY.

MARSH'S PATENT TRUSS.

This instrument which has been advertised extensively in this country under the appellation of *Marsh's Radical Cure Truss*, is in reality a good imitation of a truss "invented by Wm. Marrison, TRUSS MAKER, Leeds, England." A description of this instrument may be found in the surgical writings of William Hey, Esq., F. R. S., and a diagram of the instrument is given in Hey's '*Practical Observations in Surgery*' reprinted in Philadelphia in 1805, by James Humphreys. A correct representation of Marrison's truss is hereby given, together with the description as written by Mr. Hey: "With the leave of the maker I have presented my reader with a front view of it. It consists of two pieces of thin elastic steel, which surround the sides of the abdomen, and nearly meet behind. At their anterior extremity they form conjointly *an oval ring, to one side of which is fastened a spring of steel of the form represented. At the end of this spring is placed the pad or bolster that presses upon the hernia.*"



If the above description had been penned to represent the patentable (?) part of Marsh's truss, it could not well be more explicit.

We have been to the trouble of giving this extensive elucidation, for the particular benefit of the members of a very learned Association, said association being rigid in regard to patented instruments. The most scrupulous of the body referred to above, after this exposition, may henceforth, without violating any of their favorite rules, recommend *Marrison's Truss* as manufactured by Mr. Marsh.

MEANS RECOMMENDED FOR PRODUCING LOCAL ANÆSTHESIA.

1. TAKE of tincture of aconite, alcohol, chloroform, each, one ounce; morphia six grains: mix. Rub the gum and the tooth with a finger, and then moisten two pieces of tow or wadding with the liquid, and applying them upon the two faces of the alveolar margin. As soon as, and while the patient is tranquilized (suffoque) by the chloroform, extract the tooth; no pain will be experienced. (*Dr. A. Preterre from L'Art Dentaire.*)

2. Take a small flask containing one third its capacity of powdered camphor, and fill it with sulphuric ether. By means of a piece of sponge attached to the end of a whalebone, apply some of this solution to the gum or over the part where the bistoury is to cut, rubbing lightly for about a minute, and then operate. If the patient complains, renew the friction. By this local anæsthetic agent, teeth may be extracted, felons incised, and various other operations be performed without the patient experiencing any pain. (*M. A. Cluisse. Ibid.*)

For Toothache.—The acetate of morphia, one decigramme, or a little more than one grain and a half, troy; acetic acid, two drops; cologne, eight grammes, or somewhat less than 123½ troy grains; mix. Moisten a small piece of cotton with this liquid, and place it in the ear of the side corresponding with the affected tooth. According to M. Ballot the pain ceases as if by magic. *L'Art Dentaire.*

Soothing Mixture.—Take of formic ether 20 grammes, or about five drachms eighteen and a half grains, troy; spirit of balm, (alcohol de melisse,) eighty grammes, or about one ounce, five drachms and fifteen grains, troy; phosphorus twenty-five centigrammes, or rather more than three grains and three fourths, troy; mix. To be applied by friction over painful parts, repeating it five or six times a day.
L'Art Dentaire, from Repertoire de Pharmacie.

IS ELECTRICITY A GALVANIC AGENT.?—BY M. E. ROBIN.

ON the one hand, electrical currents may develop heat of great intensity, capable of melting and volatilizing metals, agglomerating sand, etc. On the other hand, heat and electricity promote those combinations which can give birth to stable products. We are prepared then to believe that under the influence of competent and properly directed currents, the oxygen of the blood enters into combination, and wholly or partially disappears. Numerous facts have proved that the blood properly deoxygenized is no longer capable of maintaining sensibility and general contractility; consequently, anæsthesia will be produced in those parts where the blood is found thus modified by an electric current. I believe it is by this method of action, that electricity frequently produces such excellent effects in the treatment of nervous diseases. When we employ it without understanding, such results are not obtained; and by determining at times excitation instead of sedation, we are led to look upon electricity as being capricious, and from this cause the facts verified in America have been received with so much incredulity in France and England.

As for myself, I have been of the opinion for a long time that electricity, according as it is weak or intense, is very proper to produce either excitation or anæsthesia. My researches on the causes of death by lightning, published several years since, would necessarily lead to these results. Electricity being anæsthetic in consequence of its energetic action on the blood, causing its oxygen to disappear, the anæsthesia which it produces is not a singularity; it is one more fact to add to the numerous series of facts of anæsthesia by asphyxia, and this fact also sustains the views I have assigned on the mode of action of anæsthetics by inspiration, as well as to a number of other agents, protectors against slow combustion.

My hypothesis not only shows from whence comes the anæsthetic power of electricity, but likewise the conditions to fulfil in order to attain the result. Some experiments in which my principles are put into practice are now in progress and will be continued. Commissioners M M. Becquerel, and Cl. Bernard. Translated from *L'Art Dentaire.*

SULPHATE OF QUINIA.

"Admitting that quinia is *antagonistic*, its power of antagonism can extend no further than to those diseases caused by deleterious agents or miasms, as ague, bilious, typhoid, and yellow fever, erysipelas and other diseases where there is a qualitative change in the blood.

You probably will not say that pneumonia is a disease of this kind, unless it is either of the typhoid or the bilious type. I mean, that you cannot consider a simple pneumonia, caused by exposure, as a disease caused by the presence in the system of any agent requiring an antagonistic remedy.

Would you give quinia in such a form of pneumonia? and if so, upon what principle? We have been taught to pursue an antiphlogistic course in this form of the disease, but with us it has appeared in the asthenic form, and we cannot resort to depletion with safety. I would like a reply through the JOURNAL."

REPLY.—In the most simple form of pneumonia, there must be a formation of a deleterious material within the delicate pulmonary tissue, and probably also within the capillary vessels between the pulmonary arteries and pulmonary veins; the presence of this deleterious material in the lungs causes the diseased manifestations, and which *is* the disease.

The very word, *antiphlogistic*, implies antagonisim, and the error has been and is still acting upon the minds of some, of supposing that the only way to antagonize inflammations and fevers, is by the use of such measures as produce *depletion.*

Modern research and observation, however, has demonstrated, that the presence of such deleterious agents as cause inflammations or fevers, almost invariably, if not in every instance, produce *debility*, or a depression of vitality below the standard of health; and the system not only requires antagonistic agents to destroy or remove the cause or causes of the disease, but also requires stimulation and sustaining remedies to enable it to throw off the invading and depressing poison, and also to bring it back to its natural standard of activity and strength.

In what may be styled simple pneumonia, or when the disease is still confined to the lungs, there is need of the antagonistic and stimulant treatment as well as in those forms of the disease where the brain or the liver is also diseased; and quinia has proved to be beneficial in all these forms of pneumonia.

QUERIE No. 2. "Would not quinia be far more successful in puerperal fever and erysipelas, than bleeding, calomel, and opium, which is often resorted to in these cases."

Doubtless it would. In all cases, where the products of vegetable or animal decomposition, and particularly where the products of animal decomposition are acting as poison within the system, quinia proves useful. But generally it needs to be accompanied with medicines that act on the skin or kidneys, or both, to increase elimination, that the poison, as changed, may be aided in its escape from the system.

MARRIED.

On Tuesday, March 1st, at the residence of the bride's father, in Montgomery County, Ohio, by the Rev. G. M. Hair, P. M. SMALL, M. D., to MISS MATTIE J. AUSTIN.

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ORIGINAL CONTRIBUTIONS.

MEDICAL VAGARIES.

BY H. G. BARROWS, M. D.

WE of the present day, can hardly coax ourselves into the belief that the medical representations and vagaries of past ages could have obtained credence with the people of those ages; nor should we, perhaps, for a moment entertain the possibility of their obtaining such credence did not the historians of the past compel us by the increasing evidence of recorded facts.

In looking back to the earliest period of medical science, we shall learn that its progress toward the condition which it has attained, has been slow and unequal, and not like that steady and successive improvement which has characterized other branches of natural knowledge.

In setting forth some of the many vagaries of medical faith and practice, let it be understood that I lay no claim to originality, inasmuch as all that are presented are the gleanings of history; and if they do not serve to instruct, they may at least amuse the curious, and perhaps profitably occupy the leisure of a half hour.

Medical science has had much to contend with; it has of necessity met the capricious prejudices, superstitions, and knavery of mankind, and must continue so to do in the future, to a greater or less degree.

Empiricism, or quackery as it is termed in modern times, has done more to weaken public faith in the efficacy of remedial agents than all other causes combined; and with *this* species of knavery it is at this day obliged to contend, and almost, perhaps, to the extent it did in former days when one attempted to enumerate the virtues of plants from *experience*, and another gravely declared that *roasted toad* was a specific for the pains of gout, and further asserted that a person might secure himself for a whole year from sore throat, by eating a *roasted swallow*.

Lord Bacon truly remarks "that the human understanding is not a mere faculty of apprehension, but is affected more or less by the *will* and the *passions*; what man *wishes* to be true, *that* he too easily believes to be so."

The application of the reeking entrails of a recently slain animal, appears to have been one of the earliest methods adopted for the relief of pain; and the antiquated remedy of the *split fowl*, must be fresh in the memory of all. When these resources failed, charms, amulets, and incantations were the usual expedients. In fact, the words *incantation*, and *charm*, appear to have been derived from the ancient practice of curing diseases by poetry and music. Democritus says; "that many diseases are susceptible of being cured by the sound of a flute, when it is properly played." As we have so many professional performers on that instrument in our midst, if there be any virtue in the remedy, it would certainly be a very pleasant and economical method of medication.

Marianus Capellus, assures us, "that fevers may be cured by appropriate songs," although he does not enlighten us with regard to the *kind* of songs that are appropriate. It is pretty certain, however, they do not at present exist, whatever may have been true of the past, for we have an abundance of song singing, and an equal amount of fevers.

Asclepiades actually employed the sound of a trumpet for the relief of hip gout, and tells us "that its use is to be continued until the fibres of the part vibrate or palpitate, when the pain will vanish." Had the excellent brass bands, which at present abound, been in existence then, what a vast amount of good might have been accomplished.

We are informed that the Egyptian king, Nechepsus, declared that a *green jasper* cut into the form of a dragon, and applied externally, will strengthen the stomach, and organs of digestion. In our day we have something analogous to this charm; it is that of wearing a blood-stone about the neck to prevent bleeding at the nose. Superstition has been more or less mixed up with the science of medicine from its earliest history. Lord Bacon observed: "That in the opinion of the ignorant multitude, witches and impostors have always held a competition with physicians." And Galen himself complained "that his patients were more obedient to the Oracle in the temple of Esculapius, or to their own dreams, than they were to his prescriptions."

Every disease which did not strike the senses of the people, as to its origin and cause, has been attributed to the wrath of heaven, to the resentment of some invisible demon, or to some malignant aspect of the stars.

The plague of London was attributed, by the writers, of that day to some like cause. A Mr. Kemp published a pamphlet on the plagne, dedicated to Charles II, in which he says, "one cause of the breeding of this pestilence is, that corruption of the air which is occasioned by the influence of the stars, by the aspects, conjunctions, and oppositions of the planets, by the eclipses of the sun and moon, and by the consequences of comets." Even Hippocrates advised his son Thessalus "to study numbers and geometry, because the rising and setting of the stars have a great effect upon distempers."

Citoris, the historian of the celebrated "painter's colic" which raged with such epidemic fury in the sixteenth century, drops a hint, apparently to account for the origin of this disease, viz: "that to the great astonishment of astrologers, a new star had, in the same year, made its appearance in the constellation of Cassiopia."

Precious stones, as we are historically informed, were originally used as amulets, or charms, but by some mistake they passed from the outside to the inside of the body in their mode of application, for we find them ordered to be pulverized and taken in certain prescribed doses as specifics. Mystery is the very soul of empiricism; withdraw the veil, and the faith of the patient instantly languishes. Soranus, for instance, who was cotemporary with Galen, tells us that honey proved an easy remedy for sore mouth, but instead of at once referring the fact to the medicinal qualities of honey, he very seriously explains it, from its "having been taken from bees that *hived near the tomb of Hippocrates*."

The same superstition has obtained with regard to other remedies. The Druids of Gaul and Britain, who were both priests and physicians, gathered and cut the *mistletoe* with a golden knife, and only when the moon was six days old, and afterwards being consecrated by certain forms, it was considered "an antidote to poisons, and a preventative of sterility."

The herb called vervain, after libations of honey, was to be gathered at the rising of the day-star, when neither sun or moon shone, and with the *left* hand only. When thus prepared, it was said to "vanquish fevers, and other distempers; was an antidote to the tribes of serpents, and a charm to concilitate friendship."

Great men have not been entirely free from the superstitions of the age in which they lived. Lord Bacon, with all his philosophy, betrayed a disposition to believe in the virtues of charms, and recommend "the thigh bone of an executed criminal as a powerful remedy in dysentery."

EXPERIMENT IN GALVANIC ANÆSTHESIA.

BY DR. FONSSAGRIVES.

[Translated from the French, by Prof. J. King.]

The successful results obtained by M. Morel Lavallie, in his experiments with Faradaic anæsthesia, have induced Dr. Fonssagrives of Cherbourg, to repeat them. The results which he has obtained have been communicated to the Academy of Medicine, and fully confirm the statements announced by Morel Lavallie. The following is a brief resumè of Dr. F's. communication.

The first subject operated on had a very large felon on the thumb of the right hand. The pain was excrutiating, the swelling enormous, to relieve which, a large incision was absolutely necessary. Dr. F. determined to try Faradaization upon the patient as a means of anæsthesia, but, as he states, without attaching any great importance to its employment. The result far exceeded his expectations; the patient having felt no other impression than the vibrating formication caused by the recomposition of the currents in the midst of the tissues. The incision, which was very deep and about an inch and a half in extent, was purposely conducted slowly by the operator, and produced so little impression, that the patient, who was quite pusillanimous and had at first manifested a dread of the operation almost to fainting, desired a new incision on the next day, which was judged useless. This experiment has been renewed on five persons having ulcerated syphilitic buboes, requiring incisions of greater or less extent. Four of these did not manifest the slightest indication of pain, neither by contractions of their visages, nor by their reiterated assertions. The fifth made a sudden movement at the moment of the passage of the bistoury, but declared he had not felt that he had been cut; and a contrary experiment, which he submitted, without any incision being made, the action of the Faradaic currents, produced a perfectly identical movement, so that the separation of the tissues cannot be considered the cause of it. The whole five complained of a numbness in the corresponding inferior extremity, but of which there remained no traces after a few minutes had passed. The rumored statements of the possibility of dividing the tissues without pain by means of an electric bistoury, appear then, adds Dr. F., to be incontestibly true, and the field of its practical applications may be calculated from this time forward. Faradaic anæsthetization cannot, however, be expected to take the place of the more complete and more satisfactory effects obtained by chloroform; but in the numerous cases where this heroic agent ought not to be employed, as, for instance, where the operations are not of a serious nature, and of short duration, where there are contra-indications to its use, etc., electricity will fulfil the purposes of surgical anæsthesia in a very happy manner. It is immensely superior to the other means of local anæsthesia, (as ice, compression, various kinds of ether, etc.,) because instead of acting only on the surface, it insensibilized each nervous fibre to any depth it may be carried, wherever the knife meets them.

From the results which he has obtained, Dr. F., has no doubt that for operations of little importance, as for instance the amputation of a finger, a very complete anæsthesia can be obtained by this method. Minor surgery appears to him to be the real domain of this process of local anæsthesia; and the following are the cases in which he thinks it most applicable.

1. Application of the cautery by the bistoury; (he has tried to apply the Vienna paste by covering the caustic with a piece of silver communicating with one of the reophores or conducting wires, the other being placed on the neighboring parts;—but the results have been equivocal—probably there may have been something defective in the process employed).

2. Scarification with cups. If the German scarificator be used it should be placed in communication with one of the poles; if a bistoury, it should be armed with a reophore.

3. In the passage of a seton; one of the conducting wires should be placed along the center of the tent or threads and fastened to the eye of the needle.

4. Constriction of the pedicle of certain tumors by a metallic thread through which the current traverses. Dr. Foussagrives has employed the instrument of Segendre and Morin, and which appears to him to be sufficient for all the requirements of Faradaic anæsthetization.

DISLOCATION OF THE LONG HEAD OF THE BICEPS.

BY THOMAS ELLIOT, M. D.

By referring to the various works on surgery, the inquirer would be induced to suppose that displacement of the tendons was an occurrence which the surgeon would never be called upon to treat. Few accidents are so little noticed or understood as those of dislocations of the tendons, the long head of the biceps is of more frequent occurrence than that of any other tendon, and the consequence, when unreduced, is not only great inconvenience to the patient, but it deprives him to a great extent of the use of the injured limb. The malady was first noticed by Magnetus a surgeon of Genoa, about the year 1735. Boerhaave also speaks of the possibility of the tendons of muscles slipping from their places when the sheath is so relaxed as to offer little or no resistence during violent muscular efforts. Sieutand in 1742, alluded to the displacement of muscles in the lumbar regions. Other writers, as, Bromfield, Stanley, and Smith, have referred to similar cases of displaced tendons which they observed in the dissecting rooms. Mr. John Soden, in 1841, published a paper giving the details of two cases of dislocation of the long head of the biceps which he had the opportunity of dissecting.

Displacement of this tendon may occur, possibly, from violent muscular contraction, but the most frequent cause of its dislocation is a previous luxation of the head of the humerus, by which the capsular ligament and sheath of the tendon were ruptured, allowing the tendon to slip from its position when the osseous dislocation was reduced.

When this has occurred, pressure along the front of the joint on a line corresponding with the bicipital groove occasions much pain; the patient is unable to raise the hand to the head; acute pain is felt in the biceps muscle, particularly at either extremity, when this muscle is brought into action. The arm cannot be carried beyond an acute angle with the body, because the head of the humerus being thrown upwards under the acromion process of the scapula, the greater tuberosity is brought into immediate contact with the acromion. Accidents of this character bear a close resemblance to a partial dislocation of the humerus upwards, and without a close examination may be mistaken for it. I have met with two cases of this dislocation, both of which were the sequelæ of an unfortunate reduction of a dislocated humerus. The first was in a lady who after the injury occasioned by the dislocated bone had been repaired, found herself unable to raise the arm to a right angle with the body. The shoulder presented a peculiar appearance, slightly shorter than the other, with the head of the bone above its natural position. Having never seen or read of a case of the kind, I was at a loss what to do. Not knowing what was the matter I gave her a stimulating liniment, thinking perhaps the difficulty might in time disappear of itself. But finding myself disappointed in that regard, the difficulty growing worse, rather than better, I determined to try the virtue of force in extending the arm. The hand being in a prone position, an extending force was applied to the wrist, by which the head of the humerus was drawn downwards and outwards. With my hands grasping the bone just above the insertion of the deltoid muscle I pushed it forcibly downwards, directing the assistant to describe a circle with the hand by carrying, it backwards upwards, forwards and inwards, when a distinct snap was heard in the joint, after which the arm could be moved in any direction with the utmost ease. In carrying the hand to the opposite shoulder the tendon was again displaced and the inability to carry the arm upwards and outwards returned.

I had now a tolerably correct idea of the nature of the difficulty, and the next question was; how shall it be retained in its position? It occurred to me that if the pectoralis major muscle could be put upon the stretch, after the tendon of the biceps was replaced, it would have a tendency to hold the tendon of the latter muscle in its position which naturally lies immediately under that of the former.

The objects to be kept in view in cases of this character are:—to overcome the action of the muscles immediately surrounding the joint, to reduce the tendon, and then keep it in its place after the reduction.

In many cases the manipulation already described will be sufficient to accomplish these results, especially if the tendon is thrown forwards. It sometimes happens, however, that it is dislocated backwards, in which the circle described by the hand must be performed in an opposite direction. I know of no means of determining whether the tendon be thrown backwards, or forwards, as the deformity is exactly similar in both cases. It is probable from the obliquity of the head of the humerus, and the smaller size of the tuberosity upon the inner side, the inward displacement is much more common than the outward. After having determined the nature of the malady, but little difficulty will be experienced in reducing it, the principle trouble arises in attempting to keep the tendon in its place when reduced.

A CASE OF CHRONIC PLEURO-PNEUMONIA AND TUBERCULOUS PHTHISIS—AUTOPSIC APPEARANCE, ETC.

BY F. W. ENTRIKIN, M. D.

I wish to lay before the readers of the College Journal, a sketch from my record, of a case of pulmonary disease, which is somewhat remarkable, for two reasons: First, because of the extent to which disease had progressed before death;—and secondly: on account of the almost entire absence of many of the symptoms, (as cough, etc.,) which usually mark the progress of extensive pulmonary disorganization.

For some months before death, the patient, a lady, appeared so exempt from the more harrassing pulmonary symptoms, as to lead some of her friends to suppose that she had recovered from her lung difficulty, and that there must be some other cause for her gradual decline. I was consulted by the lady above referred to, on the 16th of July, 1858. She was married; had two children, the youngest two years old; nervo-sanguine temperament, the nervous at this time predominating; of slender form, predisposed to tubercle disease. She was feeble and emaciated; appetite poor, digestion impaired, calorification imperfect, menses suppressed, occasionally, however, evincing a slight ovarian action. Pulse ranging until her death, from one hundred to 115 per minute. She had the usual anæmic appearance. No evidence of organic disease except of the thoracic organs, and this only manifest to the casual observer by the shortness of breath, and to the physician by ausculation and percussion. She had suffered at different periods of her life from chills and fever, and also from severe pleuritic attacks, which usually subsided in a short time, leaving the chest nearly, if not entirely free from pain.

My diagnosis, after a careful examination, was in accordance with the facts, (as afterwards ascertained,) except in one regard. I told her friends that the case was incurable, but agreed to try some remedies. From this time until October 3rd, being about two and a half months, I treated her with counter-irritants, quinia and pulverized iron, canabis Indica, taraxicum, hyocyamus, muriate of ammonia, and occasionally nervines, as scutellaria and cyprepedium. The above agents variously combined or alternated, sometimes useing one sometimes another as the changes of the case seemed to require, together with the constant use of a syrup of the hypo-phosphites of soda, potassa, and lime, and a little good brandy, *which she bore well.* These with regular sponge bath and a liberal diet, seemed to improve her general health. She gained in flesh and strength; her appetite and digestion improved; and her menses became regular. Still I felt that the amount of organic disease present must eventually prove fatal. October 3rd, she took the flux, then prevailing in that section, which yielded readily to treatment. The attack so prostrated her that it became evident that she must soon die. Slight œdema of the limbs came on, and her appetite did not properly return. When she so far recovered as to be able to walk around her room, I discontinued my attendance, convinced that all efforts to save her would be futile. She still continued the use of the hypo-phosphites, etc., from this time, Oct. 7th, until the evening of the 28th, of October, when she retired early, appearing as well as usual. Shortly after, some one noticed her make a gurgling noise, and on approaching her bed, found her dying. She made but a few ineffectual efforts to breathe after her condition was discovered.

On the evening of the 29th, about 26 hours after death, I proceeded to make an autopsic examination in the presence of the physicians of Gilboa, viz: Drs. Paul, Moe, and Luce. There was yet animal heat in the epigastric region, though the muscles were quite rigid. The blood was all fluid; and in the arteries and left side of the heart, as well as in the veins, was of an unusually dark color. The pleuritic sac on both sides was entirely obliterated by adhesive inflammation, and so firmly did the lungs adhere to the sides of the chest at every point, as to make it impossible to tear them loose without injuring the structure of the lungs. When the sternum and costal cartilages were detached in the usual manner, they could not be raised until the entire surface was dissected loose; and so of every other point of the lungs' surface. Becoming tired of this tedious process, which was somewhat impeded by the fluid condition of the blood, I cut across the superior part of both lobes, leaving a small portion of each just under the clavicle. On removing the contents of the chest, we discovered, on the surface where the lung had been cut across, a shining smooth velvety surface, nearly circular, and about one inch in diameter. The corresponding part of the lung being removed from the corpse, the two smooth surfaces applied to each other, formed a sac, which was evidently the cicatrix of an old ulcer, that had formed, no doubt, some four years previously, at a time when she suffered severe pulmonary symptoms, and from which she recovered under the care of Dr. Luce, of Gilboa. On slitting up the bronchia, they appeared perfectly healthy, until we came near the seat of the old cicatrization. There for about half an inch, a bronchial tube about the size of a crow's quill, was dark colored, and appeared once to have suffered severe inflammation, which, no doubt, had been more extensive; but all evidence of previous disease had been removed, except from this small portion. Tracing the diseased surface with a probe, an opening was found about one line in diameter, and opening into the sac that had once contained disorganized matter. It was closed at the bronchial surface by a delicate and nicely fitting valve, formed by a continuation of mucus membrane on the one side, and the lining membrane of the sac on the other, separated by a little dense structure, giving it firmness.

Both lungs were extensively hepatized, and more especially along the surface covered by the diseased pleura. Scattered through the hepatized mass, were innumerable tuberculous formations, of the brown variety, and in every stage of progress, from hard, partly organized tumors to those containing pus in a fluid state. Near the apex of the lungs and close to the larger bronchia, were also many tuberculous masses, of all sizes, from patches of miliary tubercle, to encysted tuberculous tumors, as large as a shell-bark nut. Some dozen or more of these large encysted tumors of a parabolic shape, containing pus were found. Indeed there appeared to be but little pulmonary structure which was not more or less affected. This patient never had expectorated tuberculous matter, except for a short time after the opening of the abscesses before mentioned, some four years before death.

The pericardial sac contained a small quantitiy of heavy serum, and its structure appeared altered by thickening in places, as if the seat of an inflammation of a slow chronic character. The heart had suffered somewhat from fatty degeneration, and in the fatty investment of the right auricle were quite a number of tuberculous tumors; some as large as a buck-shot. The spleen was slightly enlarged. The stomach and liver appeared healthy. No further examinations were made.

I think this case proves; *First* that extensive pulmonary disorganization may exist without cough; with but little fever, except that which follows occasional chills; and entirely void of exhausting sweats. In how far the symptoms in the above case may have been modified by treatment, I can not say. *Secondly*—That much may be done to improve the condition of cases necessarily fatal, and that a similar course of treatment, in a similar case, with less extensive disease, might be successful. *Thirdly*,—That extensive abscesses in the lungs may heal and leave the parts comparatively sound; and the patient afterwards recover a fair degree of health; also that physical diagnosis is the most reliable method of detecting pulmonary disease. And last, but not least, that notwithstanding all the boasting of venders of universal panaceas, there is a class of patients affected with pulmonary complaints among us, who are occasionally incurable, because of the extent of the ravages which disease has made; changing the structure of vital organs to such an extent as to be incompatible with the continuance of life for any great period, even under the most favorable circumstances. These facts may have been proven hundreds of times, yet "by a multitude of witnesses," should every fact in medicine be established. Let me say, in conclusion, that I have treated several hundred cases of tubercular *phthisis pulmonalis* in the last five years, from the western counties of this state, and various parts of Indiana and Michigan, and endeavored to observe closely the effect of different methods of treatment: That for the last four years, my principal reliance has been on the phosphates of soda, iron, and lime—now substituting, however, the hypo-phosphates of the same agents—and the plentiful use of good brandy, assisted at times by the inhalation of the vapors of ammonia, the terebinthinates, and balsams, and the use of such other agents, from time to time, as appeared necessary to correct derangements of other organs. I may also add, that with these means and a flesh diet, proper attention to bathing and exercise, I have had the satisfaction of seeing many apparently hopeless cases, restored to comparative health.

A CASE OF HIP DISEASE.

BY A. C. ELDER, M. D.

Mrs. M., of this (Marion) Co., (Ill.) was attacked in Nov. last, with disease of the hip-joint. The pain was severe, inflammation running high. I made use of anodyne and diaphoretic treatment internally, and stimulating liniments locally. No benefit seemed to be produced by that course, therefore I made trial of other means. I attempted to move the bowels with the comp. powder of jalap, aided by podophyllin and the sulphate of magnesia, but failed. I then ordered enemeta of various kinds, and one of tobacco finally proved effectual. I next applied the irritating plaster of King's American Dispensatory, over a large surface proximate to the articulation. The effect of this was to relieve the pain. By the third or fourth day the part covered by the plaster was suppurating freely. This was not painful, on the contrary she "could not endure to have it off." In a few days a tumor the size of a child's head formed, which gave evidence of an accumulation of pus. This tumor was opened, and its contents discharged, air being prevented from entering, as much as possible. Soon active inflammatory symptoms subsided, and the normal secretions of the body were restored. I gave my patient such supporting and restorative medicines as in my judgment seemed indicated from time to time, allowing her wine and cider for drink. Capillary action was excited with hand baths, her body readily responding to every remedial agency directed.

The recovery was rapid and complete; no untoward feature presenting itself in the case. The irritating plaster, by its derivative action, seemed to exert a most happy effect. The disorganization of bone was not considerable, as the functions of the joint were not particularly interfered with by the attack.

I have reported this case as counting *one* in the statistics of hip-joint disease. Very likely it was milder than the majority of cases, but I am inclined to believe more would be milder if the above treatment was pursued.

A CASE OF SEVERE SCALDING.

BY M. E. FINNEY, M. D.

Sometime about the middle of Oct. last, a youth of eighteen, while engaged as fireman on a boat, was severely scalded by the explosion of a boiler. Both arms, his limbs, and the lower part of his back, and also the hypogastric region, were so badly scalded as to be almost entirely denuded; the skin pealing off on the removal of his clothes. I was called to see him four days after the accident; found him very low, not able to take any nourishment, with a cadaverous countenance betokening great depression of all the vital powers; not much if any sense of pain or suffering. I thought at least life would terminate in a few hours. I prescribed three grains of the sulphate of cinchonia, to be given once in three hours in good brandy slightly diluted, and for the scalded surface a mild ointment of stramonium.

I visited him the ensuing day; found him able to take a little light nourishment, his face was a good deal flushed; pulse full and frequent, which gave evidence of a high state of reaction. I saw very plainly that it was necessary to maintain if possible an equilibrium in the system, and prevent an irritative fever.

I then prescribed sulphate of quinia and sulphate of iron, in doses of three grains each, once in four hours, and tinct. of aconite root four drops every two hours, until the fever abated. The odor of the patient at this time was almost intolerable and continued so until the healing process was nearly completed, notwithstanding the use of the chloride of lime distributed freely about the apartment, as well as the utmost pains taken as regards cleanliness. His burns were dressed with clean old linen every twenty-four hours, and the bed and bedding all changed at the same time. Suppuration atter a few days became excessive; it seemed to me on lifting the bed-cloths from my patient that he literally swam in pus. He continued to improve slowly until near the close of the second week of treatment, when typhoid symptoms developed themselves; his bowels which were at first inactive, began to be irritable and finally he ceased to have any control over them. It was impossible to give him soothing and astringent enemas, the parts were so severely scalded, and he could not be turned on either side, the decubitus being from the first entirely on his back. I now considered the case as hopeless beyond a doubt, and told his parents that I did not expect him to live until morning, as he evidently seemed sinking fast.

I prescribed sulphate of quinia and hydrastine, of each two grains, to be given once in two hours; also three grains of the acetate of morphia dissolved in a half glass of water, in doses of a teaspoonful every half hour, until he became easier and his bowels ceased to move so frequently. I called the next morning and found him improved. Some fever still, but every way better. I continued the powder once in three hours, and tinct. of aconite, four drops, once in four hours. As a dressing for his limbs, lime water combined with slippery elm mucilage, to be applied alternately with the stramonium ointment.

My patient began to mend toward the close of the third week; his fever had subsided, and he had an appetite. He continued thus to mend for several days, when he prevailed upon his mother to give him a dish of bread and milk, of which he ate very greedily. A few hours after he began to be distressed, and nausea and vomiting ensued. They then tried to stop it, but without success, and finally sent for me. I would state that this patient lived quite a distance from me, therefore I was unable to watch the case as closely as I should like to have done. I found him much prostrated, his countenance wearing a very anxious suffering expression. His mother showed me what he had vomited; it comprised nearly three quarts of dark green fluid. He remarked that he felt something run from his right side into his stomach which presently distressed him and induced vomiting. I prepared acetate of morphia as before described, and gave a teaspoonful once in fifteen minutes. He soon became easy and the vomiting ceased without any other prescription. It seemed highly important at this time to sustain the patient with a nutritious diet, but I had carefully to select such articles as could be easily digested and assimilated. Once again I remember he prevailed upon his mother to give him some sausage, an article of diet that I had strictly forbidden. The result was a repetition of the distress and vomiting which was soon relieved as before. From this time onward he gained slowly in strength. The more superficial burns healed rapidly and kindly. The new cuticle looking as fine and smooth as an infant's. His right arm was burned the deepest. The elbow joint was completely exposed, and he suffered greatly from the consequent irritation of the ulnar nerve. This arm was a long time in healing; I was fearful of his having an ankylosed joint, but this last and worst injury is healed without any deformity, or unsightly puckering cicatrices. The portions that were the most deeply burned were dressed toward the last, with the red oxide of lead paste. He also took compound syrup of sarsaparilla after all symptoms of fever had subsided.

I consider this case remarkable in two respects; *first* that he recovered at all, and *secondly*, that he recovered without *any* deformity.

EXTRACTS.

BY PROF. J. F. JUDGE.

The success of a physician depends much upon the quality of his remedial agents, so that it frequently happens that a practitioner of the healing art meets with disappointment when least expecting it, owing to the inferiority or impurity of the medicines administered. This evil of poor and even sophisticated drugs being in the market, and so frequently palmed off upon the unsuspecting and thoughtless, is a source of much regret to all earnest promoters of Rational Mediicine; for, while it diminishes confidence in the art, it is also a source of frequent injury to the patient who is thus tampered with to gratify the cupidity of some small souled vender of drugs and medicines. The careful physician may, notwithstanding the frequent inferiority of drugs and medicines, procure good and reliable articles; but to attain this end it is necessary that he shall exercise the same care and watchfulness that he would in purchasing a horse of a jockey. There are doubtless many dealers who can be trusted to furnish articles which are just such as they are represented, yet there can be no excuse for the physician being duped through ignorance. It is the duty of every practitioner to be sufficiently well acquainted with the properties of such articles as he may use, as to enable him to detect spurious specimens, and appreciate the goodness of those which are pure and suitably prepared. Of the various pharmaceutical preparations, *Extracts* when properly prepared, are among the most convenient and certain in their action; but when carelessly prepared they are unreliable. The end to be accomplished in the preparation of extracts, is the procuring of the medicinal principles in as nearly as possible in their natural relationship to each other, yet separated from the inert portion of the plant with which they have been associated; thus making the bulk to be given as a dose much smaller than when powders of the crude substance or tinctures are used.

In pharmacy the term *Extract*, is used to designate a class of solid or semi-solid preparations which result from the evaporation of solutions of vegetable principles. The solutions being either obtained by the use of some menstruum or by expression of the native juices of the plant. Those which are prepared in the latter manner, formerly bore the name of *inspissated juices*, but are now with obvious advantage classed, in common with those prepared from artificial solutions, as extracts.

In composition, extracts vary much, in consequence of the varying constituents of different members of the vegetable kingdom, as well as the difference of solvent power possessed by the several menstrua which may be used in their preparation. Extracts frequently contain several of the following bodies: sugar, starch, gum, extractive, tannic acid, coloring matter, resin, oleo-resins, fatty matter, essential oils, vegetable acids, alkaloids, neutral principles, and inorganic salts. When water alone is used as the solvent, resins, fatty matters, essential oils and similar bodies are excluded from the extract, and in the case of pure alcohol being the menstruum, starch and gum are absent. The preparation of extracts, therefore requires a knowledge of the proximate constituents of a plant before it can be determined what menstruum shall be used to dissolve all of the medicinal principles which contribute to its therapeutic value; or which shall be selected in order that we may exclude some acrid or otherwise objectionable substance.

It must be recollected that the body known as *extractive*, is not the essential constituent of extracts, but has been thus designated, owing to its frequent occurrence in such preparations. Extractive was originally called *saponaceous matter* by Scheele; but subsequently received its present name owing to the supposition that it had an existence in all extracts. Its existence is seriously doubted by some chemists, and it has been clearly shown that the insoluble matter which precipitates during the decoction of peruvian bark, is due to a chemical reaction between the starch and tannic acid present in the bark. Similar reactions doubtless occur in the case of other vegetables in which these bodies exist, but, since extractive is found in vegetables which do not contain these two bodies, it is evident that this tendency of starch and tannic acid to combine, does not in all cases satisfactorily account for presence of extractive. The most striking characteristic of this substance is its proneness at an elevated temperature, to pass into an insoluble form. If an aqueous solution of vegetable principles be prepared by decoction or infusion, and this be subsequently evaporated to the consistence of an extract, and again dissolved in water and evaporated as before, and if necessary the process repeated again, it will be found that at every resolution of the extract, a portion has lost its solubility; and in this manner all of the extractive may be removed in the insoluble form to which Berzelius has applied the name *apotheme*,—deposit. Although apotheme is inert, it is not advisable always to separate it from the extract, since it may, during its precipitation, carry with it principles of an active character which would be lost if this insoluble body was always rejected.

The preparation of an extract consists of two distinct processes: the procuring of a proper solution from the substance to be extracted; and secondly, the removal of the menstruum by evaporation, so as to leave the medicinal principles in the most concentrated form.

Two plans may be resorted to for procuring a solution of the medicinal principles: That of expression, and that of treating the substance with some solvent. When the solvent is alcohol, the resulting preparation is called an *alcoholic* extract. When water is used it produces an *aqueous* extract, while the use of both of these result in a *hydro-alcoholic* extract.

The plan of expression is not adapted to all vegetable substances. Many plants do not contain a sufficient quantity of sap to permit of its ready removal in that manner, while some contain medicinal principles which are not expressed with their juices. Expression is well adapted to preparing extracts from succulent fruits, and the acrid and narcotic herbaceous plants. The plants to be expressed should be perfectly fresh and immediately contused in a mortar till they be reduced to a pulpy consistency. If from any cause the plants have been allowed to wilt it will be well to immerse them in water from six to twenty four hours, and contuse only those which have regained their natural vigorous appearance; those which do not revive under this treatment should be rejected as unfit for use. The pulpy mass which has been formed by contusion, should next be placed in a coarse linen or cotton cloth, and expressed by the application of only moderate force, otherwise particles of ligneous matter may pass through the cloth, and thus find their way into the extract. When procured, the juices have a fine green color, which is due to the presence of a considerable quantity of *chlorophyl* or green wax. If the juice be now elevated in temperature to a point varying from 150° to 170° F., the albumen will coagulate, and entangling the chlorophyl and woody fiber present, precipitate and carry with it the entangled bodies, leaving a clear, transparent solution. But it must be recollected that sometimes the albuminous matter entangles active medicinal principles, and may thus endanger the therapeutic value of the preparation. When this is likely to be the case, the precipitated matter may be added to the extract towards the close of the process of evaporation.

By solution, whenever the substance is in the dry state. It is obvious that some fluid must in such cases be resorted to, for the purpose of holding the medicinal principles in solution. The liquids most frequently resorted to, are water and alcohol, but vinegar and ether are frequently used when the active principle of the plant is an alkaloid, or an oleo-resin. The methods to be pursued in procuring a solution of the medicinal principles contained in the plant, have already been described in an article on Tinctures, by the writer, on page 52, of the February number of the present volume of this Journal.

Water is selected as the menstruum from motives of economy whenever it is admissible; but frequently some other solvent has to be resorted to, owing to the injurious effects produced upon extracts which contain volatile bodies by the high temperature required to boil water, while the large quantity of heat which is required to convert water into vapor, (the latent heat of steam being much greater than that of alcoholic or etherial vapor,) extends the period of evaporation so much, that the extract is liable, if containing fermentable matter, to serious injury from chemical action. Other reasons for the use of the alcoholic solvent have already been mentioned in the article on Tinctures, to which reference has been made.

Acetic acid is used in the form of distilled vinegar, for the preparation of extracts of some of the acrid and narcotic plants, as aconite, belladonna, hyoscyamus, and stramonium; these yielding much stronger preparations when extracted by vinegar, than when prepared with water. The acidulation of alcohol by adding to it strong acetic or other acid, renders it a good solvent for these substances.

Ether is used when the medicinal virtues reside in a volatile oil and resin. The property of dissolving, renders ether, taken in connection with its low boiling point, an admirable solvent for the preparation of oleo-resinous extracts.

Having procured a suitable solution of the extractable matter, the next step is that of evaporation. The plan of conducting this, exerts or may exert a material influence over the properties of the extract. It may be so conducted as to leave the preparation in the possession of all the therapeutic properties of the crude substance from which it is prepared, or it may render the product inert and worthless. This is, therefore, a delicate stage in the process by which this class of pharmaceutical preparations is manufactured. It must be recollected, at the temperature of boiling water, especially when air is present, that vegetable matter is very prone to chemical change, and that many vegetable principles, especially the aromatic, are volatilized when submitted to so elevated a temperature. It, therefore, becomes necessary that the operator conduct the process in such a manner that the evaporation may take place at as low a temperature as is consistent with the nature of the menstruum and the chemical affinities of the extract; and secondly, to exclude as far as possible the contact of air. The evaporation of aqueous solutions at temperatures below 212° F., notwithstanding the longer time occupied, is less liable to be attended by injurious results, than when boiling employed for the same purpose. But when the extractable matter is of such a nature as to permit of decoction for its solution, boiling may be resorted to for the purpose of vaporizing the water, and when this is done, the more rapidly it is accomplished the better. When boiling is resorted to, it should not be continued after the liquid has assumed the consistency of syrup, for such dense solutions boil at a temperature above 212° F., and are therefore liable to burn. The subsequent evaporation should be either conducted over the water bath, or by exposure to a current of dry air, in a room heated to 100° F. When large quantities of liquid are to be vaporized the process is best accomplished by separating the fluid into several vessels, thus diminishing the time occupied, since the evaporation in small quantities is more readily accomplished than in large.

Evaporation by means of the water-bath from the commencement, is much the safest plan when there is danger of injuring the extract by exposure to the temperature of 212° F. The common glue-pot makes a good water-bath, and may be used for this purpose in the absence of other apparatus, the water in the outer vessel being maintained at a temperature a little below the boiling point.

The plan adopted at several large establishments in this country, is very admirable. It consists in heating the evaporating pans to a temperature of 120° to 150° F. by the steam-bath, and having air-tight covers to them so that they may, by the aid of a good air pump, be exhausted of air and vapor, thus lessening the pressure to which the liquid is submitted, and therefore depressing the boiling point. Extracts prepared in this manner are of lighter color and of better quality, and should be used in smaller doses than those which are prepared by the usual process. Alcoholic solutions should always be evaporated by distillation, so as to recover the alcohol, which, though not absolutely pure, will serve again a similar use. The distillation should be discontinued when the residuum in the retort has assumed a syrupy consistence, and the evaporation completed over the vapor-bath, or by exposure to dry air in a warm room. In the process of distillation, air is excluded, hence one source of injury is removed by this variation of the process.

Care should be taken to avoid the adherance of any portion of the extract to the sides of the dish, since such portions become dry, and are with difficulty re-incorporated with the mass at the end of the process. To avoid this, it is better to heat the vessel at the bottom, rather than at the sides.

When the soluble matter has to be extracted by the use of water and alcohol, it is best to prepare a tincture and an infusion, and evaporate these separately to the consistency of thick syrup, when they may be mixed together and stirred during the completion of the evaporation in order to insure a uniform product.

Extracts may be evaporated to dryness, or the process may stop short of this. The dry extracts are usually prepared from astringent plants, and are used in the state of powder; while the soft extracts are used for the preparation of pills, either in consequence of their medical properties, or their adhesiveness, the latter making them good excipients. Dry extracts as well as the soft, are liable to absorb moisture when they contain deliquescent salts. Soft extracts are liable to dry whenever they contain efflorescent salts or chlorophyl. At times, saline matter separates from the extract, and is found interspersed through the mass in isolated or cohering crystals. The exclusion of air is a matter of great importance in preserving extracts. These preparations are liable, when exposed to the air, to undergo gradual oxidation, and it is therefore a matter of no little importance that the extract be as far as possible protected from atmospheric contact. This is usually accomplished by placing the extract in earthen jars, and covering them with oiled bladder, tinfoil, or better, by closely fitting covers, a strip of glazed paper being pasted over the line of contact between the jar and cover. When extracts are kept in imperfectly closed jars from the necessity of frequent use, a small quantity only should be exposed at a time, while the general stock should be kept in well secured jars to avoid drying and other injurious effects resulting from long exposure to air.

AMAUROSIS.

BY PROF. A. J. HOWE.

Amaurosis is a disease of the eye which is characterized by partial or complete loss of vision. The seat of the disease is in the retina, or that part of the brain from which the optic nerves spring. Some pathologists have not confined the term amaurosis to mere functional difficulties of the eye or blindness arising from some defect of the optic nerves, but made it embrace dimness of vision which may be produced by opacity of some of the humors or refracting media.

Several technical expressions have been used to denote varieties and peculiar appearance of the affection, but most of them are useless and unmeaning. The *gutta serena*, *glaucoma*, and *suffusio nigra* of the earlier surgical writers, are examples of these technicalities. Even now glaucoma is used to express a kind of amaurotic blindness, which is attended by a peculiar green hue emitted from the pupil.

In amaurosis there is no perceptible alteration in the organization of the eye; nor is there any mark by which the casual observer might recognize the difficulty. The experienced in such matters, however, soon discover the nature of the ocular defect by the pupil, which is almost invariably dilated; and upon inquiry it will be ascertained that the patient has suffered with more or less of the following *symptoms:* The head is the seat of *excruciating pain*, continued or periodic, *especially in the region of the orbits;* blood in undue quantities is determined upwards, on account of the cerebral disturbance; insensibility of the iris to light, as exhibited by the constant dilation of the pupil; particular hebetude of sight during some part of the day, which may be most marked as soon as the sunlight is withdrawn, *nyctalopia*; or vision may be nearest perfect during the night. Amaurotic patients, too, suffer from a cloudiness of vision, or more often from spots or motes, *muscœ volitantes*, floating before the eyes; objects viewed sometimes appear disfigured or distorted. In connection with the last unfavorable symptom, there may be scintillations of light or fiery sparks darting from the eyes; and the ears may have a ringing in them from the preternatural flow of blood to the head.

Besides those manifestations which have been enumerated as cephalic, there often are derangements of other parts of the body, existing partly as causes of impaired vision, and partly as the effect or accompaniment of the visual disorder. The alarm excited in the patient's mind by threatening symptoms of blindness, may throw the nervous system into a state of commotion, which may seriously interfere with all the functions of the body; agitation and anxiety are apt to impair the digestive organs, thereby affecting the entire organization. Debility induced by any cause, is likely to be attended or followed by night sweats, irritative fever, and a host of other ills.

Among the common causes of amaurosis may be mentioned the following: Some structural change in some part of the nervous apparatus of the eye, occasioned by inflammation of the retina; inflammation of the choroid or hyaloid membranes; pressure upon the optic nerve, produced by effusions of lymph, extravasation of blood, aneurism, tumors, and foreign bodies; softening of the brain in the region of the tubercula quadrigemini and thalami nervorum opticorum, etc. In fact, any state which renders the retina incapable of receiving with correctness the impressions of external objects; or the optic nerve incapable of transmitting the impressions; or the brain incompetent to recognize perfectly impressions received, may be a proximate cause of this disease.

Extremes of heat and cold; violent and sudden shocks to the nervous system, as a stroke of lightning; profound and prolonged mental emotion, as great joy, grief, and anxiety; exposure to a strong solar or gas light; confinement of the eye to minute objects, the lace makers of Europe being frequent sufferers; all of these and many more are predisposing or exciting causes of amaurosis. Then, too, may be mentioned certain contingent difficulties, as nasal catarrh, from its affecting the branches of the fifth pair of nerves; paralysis, and injuries; and diseases which interfere with the ramifications of the nerves just mentioned, as has been observed in many instances, though the influence or relation of the optic and trigeminus, is not well understood; scrofulous, syphilitic, and other taints; the suppression of natural discharges; masturbation and excessive venery; constipation and periodic determination of blood to the head; plethora and anæmia; narcotic and animal poisons; and in some rare cases, hereditary transmission.

Treatment.—It is no wonder that physicians so often fail to cure amaurosis, when it is considered that the causes of the disease are extremely numerous; and that the treatment recommended in surgical and ophthalmic works, is directed principally to the removal of the general or cephalic plethora.

Autopsic examinations and the ophthalmoscope having revealed in many instances of amaurosis, effusions of plastic lymph upon the retina and between it and the choroid tunic, also an organization of this lymph in connection with inflammatory changes in the retina, the very strong opinion has prevailed that mercury, gold, potassium, and other anti-plastic agents should be administered until a decided constitutional impression is perceived.

Revulsive agents, in the form of blisters, cupping, moxas and setons applied to the back of the neck and behind the ears, have been considered advantageous in attempts at diverting the blood and nervous excitement from the eye. Scarificating and leeching *secundum artem*, the temples and parts about the orbit, have been employed with the view of relieving the eye of vascular congestion. Such treatment, however, has not been successful; and many surgeons have abandoned it altogether.

In treating any case, the cause of the difficulty should be ascertained, and removed if possible. In some instances however, the cause removed, the blindness will remain; so that it becomes necessary occasionally to treat symptoms or effects in order to get rid of a disease and its accompaniments. If amaurosis come on from menstrual irregularity, the restoration of that function to a healthy condition may not be followed by a return of vision. The products of inflammation of the retina, if there has been any, must be removed. Important changes may have occurred in the structures of the eye, which may never be overcome. It is desirable, nevertheless, to remove the cause, to ensure a rapid and permanent cure. If constipation has produced the eye affection, let that be subdued; dyspepsia removed; excessive sexual excitement abandoned; mental emotions controlled; and everything promotive of health, solicited. A debilitated constitution demands a nutritious and easily digested diet, chalybeate and tonic medicine, wines and mildly stimulating drinks.

For the distressing pains about the temples, lower region of the forehead and orbits, let the parts be frequently moistened with the following pommade:

℞. Glycerine, f℥ss.
Hydrocyanic acid, fʒjj.
Aconitina, grs. jjj. M.

The mixture may be applied with a camel's hair brush. If the skin be unabraded there is no danger of this active poison being absorbed to an extent that would render it dangerous. The great sedative power of the mixture soon quiets the pain, and gives the irritated nerves an opportunity to rest. The pupils may be seen to contract towards their natural calibre soon after the anodyne application is made. While the sedation lasts, the patient is comparatively comfortable; and may be kept so by applying the pommade when the pain begins to return. Regular hours for eating, exercise and sleeping, must be rigidly observed; and exposures to strong lights avoided.

If the sight be impaired from paralysis of the optic nerve, or any of the branches of the trifacial, a drop of a solution of strychnia may be put between the lids, upon the eye-balls, several times a day; and the parts about the orbits may be rubbed with strychnia ointment. Currents of electro-galvanism may be sent through the head in various directions, once a day. In paralytic conditions these agents are indicated, and should not be neglected.

An errhine composed as follows:

℞. Pulv. Kalmia, ʒiv.
" Sassafras, ʒij. M.

may be used frequently, in cases of torpidity of the ramifications of the fifth pair of nerves.

When there are spots floating before the eyes, indicating effusions of lymph on the concavity of the retina, the iodide of potassium in small but frequent doses, should be taken in a proper vehicle,—the compound aralia, stillingia, or sarsaparilla syrup,—until these troublesome objects have been removed. These seemingly floating spots are apt to remain long after the vision has been restored, and vanish gradually. Preparations of gold, sulphur, and the best vegetable alteratives may be administered with the expectation that plastic effusions in the chambers of the eye, may be absorbed. In cases of syphilitic and other cachectic taints acting as causes of amaurosis, the agents just mentioned will exert a beneficial influence.

If it is probable that the amaurotic state depends upon nasal catarrh, means should be instituted to establish a better condition of the pituitary membrane. The inhalation through the nostrils of anodyne and astringent vapors, produce a favorable effect; as well as chlorinated washes thrown into the nasal cavities with a syringe. The cold water douche upon the head in cases of much cephalic congestion, has been extolled; but I have not found it to effect anything but momentary relief in any instance, and often it increases the difficulty it was intended to relieve.

At one time, the vapor of hydrocyanic acid, applied to the globe of the eye by means of a cup or the mouth of a glass bottle, was said to allay the pain about the organ, and do other good, but it has failed to effect much in my hands.

Baron Larrey, in his "*Surgical Essays*," recommends the use of the moxa, along the course of the *facial* and other nerves distributed to the face, and claims that much benefit followed in most cases, even from one or two applications.

The *pommade de Gondret*, ammoniacal paste, has been successfully used. It is applied to the forehead and temples, until it vesicates or severely irritates the skin. Probably it acts as does the moxa, by diverting from the inner structures of the eye, any undue vascular and nervous excitement. It cannot be denied but counter-irritants may effect something in these cases, yet they should not be used to the neglect of other agencies. In my practice, the anodyne and tonic treatment has been very successful. The internal exhibition of the valerianate of ammonia, in connection with local sedative treatment, such as has been mentioned, serves to quiet my patients, until the deranged functions have been corrected.

MEDICATED INHALATIONS.

BY PROF. C. H. CLEAVELAND.

Introducing medicine into the general system, by its application to the mucous membrane of the lungs, thence by absorption, unchanged, directly into the circulating fluid, presents many advantages, as well as disvantages over the more common method of having them pass into the stomach, with the liability of being modified by the action of the digestive organs, and then entering the circulation by a slower and less direct route than that offered by the lungs and has led many of the more thoughtful and observant of the profession to attempt medication by inhalation.

Inhalation has been practiced since the earliest times that medical treatment was recorded, and for many diseases in different parts of the system. But for obvious reasons, diseases of the respiratory organs are those for the relief of which it has more frequently been employed.

Hippocrates recommended fumigations not only with the vapor of water, but also with the vapor of vinegar, and of vinegar in which had been steeped "healing herbs," and gum-resins. Celsus made use of sulphur fumigations; and the remains of the *Roman baths* which were used by the sick as well as those in health, are the wonder and admiration of modern times.

Within the last three hundred years, many have favored the profession with their views and experience with inhalations in the treatment of various forms of disease. In 1558, Nicolaus Piso, of France, reported a case of a woman who was cured of a pulmonary disease, by inhaling constantly, dry heated air. In 1654, Dr. Bennet, of London, recommended "moist" and "dry" fumigations. He made use of no form of apparatus, but simply caused the chamber of the patient to be filled with vapor. He found that dry fumigation often aggravated lung difficulties during the earlier days of treatment, and hence he prohibited their use for two weeks after there had been hæmorrhage from the lungs.

His work, "*Vestibulum ad Theatrum Tabidorum*," contains clear and distinct directions in regard to the use of inhalations, and also contains several recipes for preparing fumigations. From it we learn that the same rules for the selection and administration of inhalations obtained then, that are observed at the present time. One of his moist recipes contained a decoction of elecampane, and sweet flag, and the leaves of hyssup,—and anniseed. Another contained liquorice, the leaves of coltsfoot and sage. Another quite astringent, contained the wood of the mastich tree, oak-leaves, myrtle, tomentil, flowers of St. John's wort, red roses, and comfrey.

His dry fumigations contained olibenum, turpentine, flax-seed, marshmallow, guaiacum, myrrh, benzoin, ambergris, etc.

Thomas Bartolinus, gave expression of very great confidence in fumigations, as the most natural method of treating diseases of the respiratory organs. In regard to the advice which had been given by Galen to those laboring under pulmonary diseases, to go to Egypt to reside, he said, all the advantages to be derived from a residence in that country, could be secured by a proper management of the atmosphere of the chamber of the sick.

Willis reported trials of fumigations in lung diseases, which were quite successful. Fuller in his *Pharmacopœia*, gives a recipe for a "*Sufflitus antiphthisicus*." Dr. Mead spoke highly of balsamic inhalations in hectic and phthisis, and considered them as having fallen into too much neglect.

M. Buckly, in his work on Consumption, published in 1769, advises the inhalation of the vapor of a decoction of balsamic and demulcent plants, through a tin cone, somewhat like a funnel, with a suitable mouth piece. In 1793, Dr. Beddoes pointed out the injury which resulted from the inhalation of oxygen, and advised that hydrogen, nitrogen, or carbonic acid be mixed with the air, in cases of hectic, or an aggravated cough. More recently Sir Humphry Davy expressed concurrence in this opinion. Dr. Beddoes recommended a communication between the chamber of those laboring under phthisis, and warm cow-houses and stables. Many have supposed this advice of practical value and utility.

In 1799, John Mudge, surgeon, published a work on diseases of the lungs, in which he portrayed the value of inhalation, in glowing colors, and his opinions and conclusions were adopted to a full extent by Dr. Coxe, of New Orleans, who quoted from his work as well as from Van Swieter, Dr. Rush, Dr. Hack, and others.

About a hundred years since, M. Billard published his views of the value of fumigation in lung diseases, and gave preference to *dry* vapor, for the reason that he had observed lung diseases to be more prevalent in moist and low countries, than in dry and more elevated regions. He thought the *atmosphere* breathed, and artificial inhalations, acted on the same general law, and as a residence in high and dry regions proved beneficial, for the same reasons dry inhalations were to be preferred in most cases. But where there is a dry and convulsive cough, or the pulmonary mucus is very tenaceous, he used warm moist inhalations, or vapors. Usually he had the atmosphere of the sick room charged with aromatic, balsamic, and antiseptic agents, free from moisture, and moderately warm. One of his favorite preparations was made by melting together equal parts of yellow bees-wax, freshly prepared from the honey-comb, and common resin. This was burned on an iron heated short of redness, and the vapor which filled the room was inhaled while the patient was quietly lying in bed. Sometimes he burned the bees-wax alone, as more emollient and less liable to irritate the lungs. He also ordered candles made of fresh yellow wax, to be burned in the sick chamber, or in the lodging-room of the invalid.

More recently the *tar vapor* has been extensively used in lung diseases. The vapor is obtained by heating tar in an iron vessel, until a vapor arises, which may either be allowed to pervade the atmosphere of the room; or as practiced by Sir Alexander Crichton about forty years since, conveyed to the lungs of the patient by means of a funnel-shaped inhaler, placed over the vessel containing the tar, and through which the vapor is introduced into the lungs. The tar may be placed in a vessel containing water, when the dry vapor is found to irritate; and care should be taken that the tar be not *burned* and lamp-black formed, which must prove quite hurtful in most cases. Drs. Bluhm, and Von Roos and Wochler, all spoke highly of the tar vapor inhalation of Sir A. Crichton. Delpit, in his article in the *Dictionarie des Sciences Medecales*, speaks very highly of this mode of medication, and particularly of the value of tar and the balsams.

The use of the tar inhalations, as practiced by Sir A. Crichton, and published in 1817, has led to the use of many nostrums, and the empirical mode of their use has naturally brought his method into disrepute in the profession. Mudge, Paris, and others spoke highly of it.

After the introduction of *iodine* into the practice of medicine and its value in the treatment of scrofula had been demonstrated, many made use of a vapor of it, in the treatment of diseases of the lungs. Sir Charles Scudamore published a work on "*Inhalation*" in 1834, in which he recommended quite highly, its use in certain forms of lung diseases. One of his formulæ was:—

℞. Iodine, grs. v.
Iod. of potassa, grs. iij.
Tinct. of conium, fʒv.
Alcohol, fʒij.
Water, f℥v. M.

Of this mixture he directed two fluid drachms to be used as the maximum, at an inhalation, and the inhalations to be repeated three times a day. The inhalation was ordered just before breakfast, just before dinner, and just before retiring to bed. The tincture of *conium should not be added to the mixture until just before inhalation*, as the iodine decomposes it.

Drs. Murray, Corrigan, Barton, and others, reported cases illustrative of the value of iodine in inhalations, not only in diseases of the lungs, but in other forms of disease of the lymphatic vessels and glands in other parts of the system; but as the iodine is powerful it must be used with caution and judiciously. It has always been found to be injurious when active inflammation is present in any of the pulmonary tissues. Even when there is no existing inflammation, it sometimes produces a spongy state of the gums, but without ptyalism, but this condition will pass away in a few days on witholding the medicine.

Dr. Scudamore also used chlorine vapor, by sprinkling the sick room with the chloride of lime, and chlorine water. This may readily be inhaled by placing chloride of lime in any dish and pouring upon it common vinegar, when the vapor may be allowed to be diffused throughout the room, or collected by means of an inverted funnel and inhaled by applying the mouth directly to the funnel, or using an inhaling tube applied to the nozzle. Lænnec in 1823, quite strongly recommended the inhalation of chlorine. It may also be disengaged by burning chloric ether in a spirit lamp, or in a convenient vessel. M. Gannal wrote voluminously in favor of chlorine for inhalation. Louis, Albexs, Toulemache, and others, have found it of extreme value. Sometimes chlorine produces considerable bronchial irriation, and then the vapor requires dilution; or should be followed by an inhalation of a sedative vapor. Dr. Scudamore was accustomed to recommend the following in such cases:

℞. Hydrocyanic acid, fʒss.
Tinct. conium, f℥ss.
Tinct. ipecac. fʒij.
Rose water, f℥iij. M.

Of this he prescribed the inhalation of the vapor from one fluid drachm, repeated two or three times a day. The apparatus used by Sir Charles Scudamore, consisted of an ordinary wide mouthed bottle, with a cork having two perforations through it, and glass tubes in the perforations. An inch depth of water was poured in the bottle, and the medicated fluid added. One of the glass tubes, (which should closely fill the holes in the cork) should be straight and extending from the top to the cork, to below the top of the liquid. The other should reach from the bottom of the cork, upward, with a curve, to the mouth of the patient, and through it the vapor is inhaled.

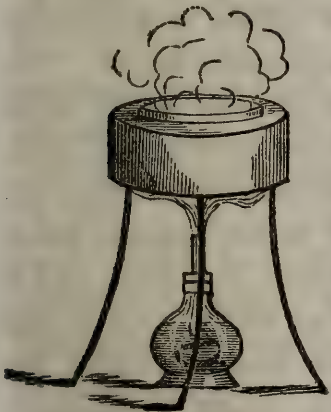
In 1839, Dr. D. J. Corrigan published his "Observations" of the value of inhalations, and gave a description of an apparatus which he had found very convenient for administering vapors and gases. He thought that the enthusiastic encomiums bestowed on this mode of medication by Drs. Dawin, Beddoes, Withering, and others, ought not to be admitted except with limitations, yet he fully endorsed the statments made by Læennec, Gannal, Greenfield, Toulmouch, Benton, and Sir James Murray.

Dr. Corrigan, Dr. John Bell, and others, have found the apparatus of Scudamore to be quite as convenient and efficient as those more expensive. Dr. John Bell highly recommended an infusion of oak-bark, as an astringent; but of late a tincture of tannic acid is found far more manageable and of equal if not of superior value. Creosote is also very beneficial, both as an astringent, a sedative, and an antiseptic.

Within a short period of time, since the introduction of inhalation for the purpose of producing anæsthesia, the idea of making an impression upon the general system by means of medicines introduced into the system through the lungs, as well as for their local use in diseases of the organs of respiration has again received the attention of the profession to no inconsiderable a degree,—and a variety of *inhalers* have been devised and introduced into use, some of which are very convenient, and others are apparently only for show, so seldom are they resorted to in practice.

We should bear in mind, that for most purposes, whether in the treatment of diseases confined to the respiratory apparatus, or of other parts of the system, it is necessary that the vapor be allowed free entrance into the lungs, and not confined within the buccal cavity and exhaled through the nose, not passing beyond the pharynx.

To insure a complete inspiration of vapor or gas, it must be so diluted with atmospheric air that it will not cause an uneasiness in breathing. By continuing the respiration of vapor thus diluted, as large a quantity of medicine can be introduced into the system as is desirable, by simply prolonging the inhalation until the proper effect is obtained. With many agents, and particularly those which produce anæsthesia, and ammonia, a proper dilution is absolutely essential to safety, and with most, it is not only more pleasant to have the substances inhaled well diluted with air, but ample experience has proved them to be far more beneficial when mixed with a proper amount of air, than when inhaled in a state of less dilution. Hence, the various methods devised for impregnating the entire atmosphere of an apartment with the medicine.



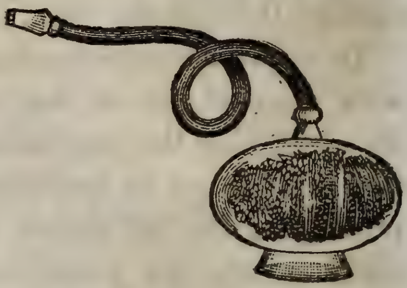
For this purpose, a chafing dish, an ordinary or a spirit lamp, with the dish filled with water, when simply a moist vapor is required to fill the room, as in croup and many forms of disease of the throat, lungs, or skin,—or with the dish containing an infusion of an aromatic or balsamic plant, when in addition to moisture, those agents are required also;—or with a tincture of various preparations, when it is designed to have the vapor of alcohol added to other ingredients,—will answer admirably.

For the purpose of generating dry vapor, the chafing dish may be filled with pure dry sand, in which a saucer containing the article to be evaporated, may be placed; and the requisite amount of heat may be imparted to the sand by the flame of a lamp placed underneath the dish. All the requisite medication of the air of the sick room may be imparted by the use of the proper ingredients, and this simple apparatus.

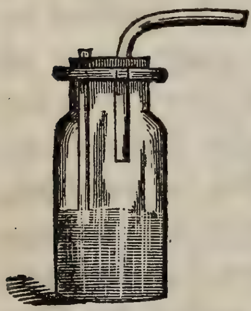
When it is not desired to medicate the entire atmosphere of the room, but to convey the vapor directly to the patient, and heat is needed to vaporise the medicine, an ordinary glass or tin funnel can be inverted over the dish containing the medicine, and by means of an inhaling tube, one end of which

passes over the nozzle of the funnel, and the other is in the mouth of the patient, vapor, moist or dry, can be generated, and inhaled by the patient while sitting in a chair or lying in bed.

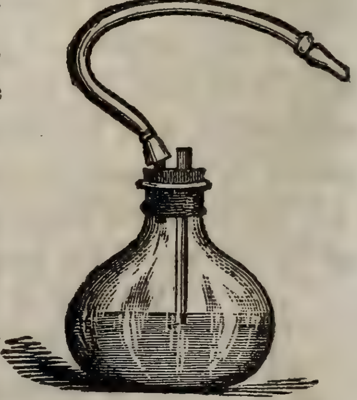
A sponge may be placed in the funnel, on which medicine in solution is poured, and as it evaporates the vapor may be inhaled. An apparatus in quite common use for the same purpose, and more convenient, consists of a nearly globular glass open at the bottom, and having on the top a tube to which the inhaling pipe is attached. Within the glass, a sponge is placed, on which a solution of the medicine is placed, and the vapor is inhaled through the long tube. This is well adapted for *cold* inhalations, which doubtless are to be preferred in many forms of disease. Chloroform, alcohol, iodine, and many other substances can readily be introduced into the system, by means of this apparatus.



For the same purposes, a wide-mouthed bottle or jar, and even the bottles in which sulphate of quinia is commonly sold, have for a long period of time been made use of. The liquid is poured into the bottle, and the mouth filled with a cork into which two glass tubes are inserted. One opening above the cork extends directly down below the top of the liquid. The other merely passes down through the cork, just above which it is bent, and it serves as an inhaling tube. The vapor rises in the upper part of the bottle, and as that is inhaled, air passes through the straight tube, *below the liquid*, and thus becomes charged with the medicine, before it rises into the upper part of the bottle. The vapor may be heated by placing the bottle in a heated chafing dish, on a heated brick, or in a dish of hot water.

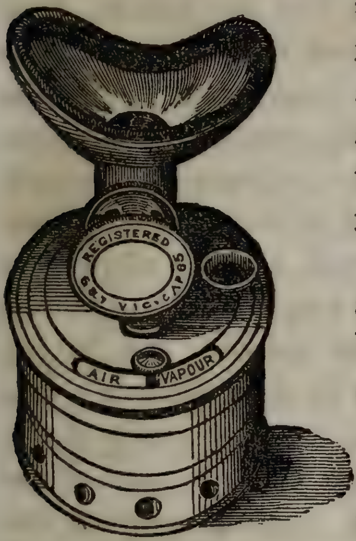


For the purpose of producing a *warm* vapor, (although a cold one can be produced by it also,) an inhaler has been devised somewhat similar to the bottle, made of thick glass, with a bottom of unusual thickness, to prevent its being easily broken by a fall, or by the heat of the liquid within, or the heated



substance on which it is placed. The diagram will convey a very good idea of this quite common, cheap, and portable inhaler.

Many other forms of inhaling apparatus have been devised from time to time, some of which cover the mouth and nostrils; but none of them appear to possess any very valuable qualities not possessed by these simple and cheap ones, except that recently invented by T. P. Sall of Birmingham, England, and described in the College Journal for Oct. last, under the name of the "Vaporateur." It was devised for the purpose of determining with considerable exactitude, the dose or quantity of vapor administered at one dose, or time. As a description has already been given, it is not thought necessary to repeat it.



With many substances, if in solution, the amount vaporised will be readily determined by measuring the solution, and having it all changed to a vapor. When such vapor is generated in a vessel whose mouth is stopped, so that none escape except through the inhaling tube, the amount inhaled can also be determined. But with whatever apparatus the inhalation is conducted, if the vapor is not inhaled as fast as generated, it will accumulate, and may become too much concentrated, or combined with too small a proportion ot atmospheric air to be inhaled with safety.

Some have supposed that inhalations are useful only in diseases of the lungs; but we may infer, if chloroform and ammonia, as well as some of our aromatics or perfumes, can produce the powerful effects observed quickly to follow their administration by inhalation, we may anticipate that other agents also, will, in proper cases, prove very and speedily beneficial, and that this mode of administering medicine is worthy of more extended trials than have been given it.

The peculiar form and kind of medicines, and the mode of administering their vapors, has been quite fully discussed in the works here referred to and others of modern date, as well as in various articles in Medical Journals, hence it is not thought best to give them in connection with the present extended article.

SYPHILITIC ENLARGEMENT OF THE TESTICLE.

BY A. B. JACKSON, M. D.

Syphilis, Hydra-like, is not easily subdued. Though its symptoms be overcome, one set after another, in the several forms of the disease, still the monster has a being, and will show a determination to return after numerous repulses. The throat symptoms and skin eruptions being cured, there may be virus enough left in the system to derange a testicle.

Syphilitic swelled testicle, or venereal sarcoma of the testicle, though its existence is not doubted by any experienced surgeon of the present day, is an uncommon complaint. Mr. Hunter, who drew no distinction between gonorrhœa and syphilis, did not admit that the testicle, from venereal infiltration, was liable to an enlargement quite different from orchitis, or gonorrhœal swelling of the gland. I am about to describe that variety of swelled testicle which accidentally comes on some time after an invasion of constitutional syphilis. The enlargement depends upon an infiltration into the meshes of the gland, of degenerated plastic material—a phenomenon characterized by a small amount of pain, or uneasiness except that excited by the increased weight of the organ—a pathological state induced by systemic venereal poisons, and having nothing to do with a gonorrhœl ainfection or its consequences. I do not allude to an enlargement of the epididymis, nor of the body of the gland alone, but to a uniform swelling in which the two parts of the organ are confounded, the depression naturally existing between the two components being filled up. These are discriminating characteristics, and must not be forgotten. The hardness of the tumor does not differ much from the sound condition of the gland; but the organ is cold, and will endure pressure without exhibiting tenderness or sensibility. The skin of the scrotum in course of time, becomes of a dull red color, with a slight tendency to desquamation.

I have seen several cases of enlarged testicle depending upon syphilitic contamination, the swelling, in every instance, following constitutional symptoms, and generally appearing after a cutaneous eruption; and I regard the difficulty as simple deposition or infiltration of degenerated lymph into the fibrous structure of the gland, its texture not being destroyed or injured, and the functions of the organ did not seem to be impaired after the enlargement had been reduced. It is probable, however, that the tumor might eventually suppurate and be lost, yet no such cases have come under my observation.

A patient affected with venereal testicle will often exhibit a countenance wearing a look of indescribable misery and exhaustion. His appetite will be gone; a tired feeling weighs him down; he suffers from night sweats; his thirst is morbid, drinks being craved more than solid food; his eyes are sunken and glassy; and the marks of old age seem to have fastened upon him. He may be harassed with pains in the bones, and feverish paroxysms, though these are not so certain attendants, as those just enumerated. In fact, peculiarities of constitution, habits, and contingencies, alter the characteristics of any disease. To say that a certain malady has an unvarying set of phenomena, indicates extreme ignorance of pathological laws. Some declare that there is no such thing as a venereal testicle; and that all affections bearing that name are mercurial difficulties. I would ask such, why it is that no more cases of "*sarcoma*" of the testicle are found in the rural districts, where every form of disease from a corn to a cancer, from dry colic to consumption, is made "to respond" most emphatically to that old bile persuader, hydrargyrum. Certainly, if mercury will produce swelled testicle, the complaint ought to be common.

A scrofulous enlargement of the testicle, when it occurs, is apt to be confounded with the syphilitic, yet the two varieties of disease may be distinguished as follows: The scrofulous testicle is a long time in forming, becomes very large, and does not obliterate the epididymis, but this and the gland remain distinct, the whole being somewhat flattened; the syphilitic testicle has a uniform appearance throughout, and is generally preceded by a venereal eruption, as before stated.

One other variety of swelled testicle needs to be mentioned in this connection. I refer to a cancerous affection of the organ. The experienced are not likely to be deceived in regard to the nature of the case, but for the assistance of those who may be in doubt in regard to the matter, it may be remarked that the weight of a scirrhus testicle, when poised in the hand, is much greater than that arising from any other cause, and the hardness of it is like that of a stone. Besides, the pain of a scirrhus testicle is severe, and darts into the loins, the lymphatics of that region sympathising in many instances; and the swelling is apt to become irregular or knobbed. The appearance of the patient, and the history of the case have a bearing upon the diagnosis.

Treatment for venereal swelled testicle. In the management of a syphilitic testicle the patient, who probably has already been through several forms of a distressing malady, is now to be encouraged, and assured that the difficulty may be gotten rid of, without the loss of the gland or its function. He is to be made to understand, however, that no treatment will subdue the enlargement at once. In many instances several months will be required to reduce the swelling. The reduction is to be affected by giving internally the most active anti-syphilitics known. Formerly I considered the bi-chloride of mercury the great syphilis destroyer, but am now convinced that it is a dangerous agent. While the hardy and plethoric endure its action well, the scrofulous and anæmic sometimes sink under its devitalizing properties. Gold, potassium, iron, and sulphur are to be used, as well as vegetable gland stimulants. The mineral and vegetable acids have always sustained the reputation of being anti-syphilitics, and undoubtedly some of them contain a degree ot efficacy as such. According to my experience the acids, for the time, apparently do much good, but in the course of a few months the disease shows itself to be as virulent as ever. The citric acid, in the form of lemonade, seemingly antagonizes the virus of venereal, yet it is by no means as effective as muriatic or sulphuric acid ; and the oxalic ranks among the most desirable of the acids in the treatment of syphilis. Vinegar and cider are deserving of mention in this connection, though they are not to be relied on to the exclusion of other agents whose value in the treatment of venereal diseases is well known.

Locally, if the testicle he not so large, by pressing up into the inguinal canal, as to prevent it, adhesive strips should be so applied as to exert compression upon the tumor. For this service the isinglass plaster is of no account, but the common adhesve plaster should be used. The strips may be cut a half inch wide, and a half yard long. These, one by one, are to be heated to melt the wax, and applied by beginning at one end of a strip at the upper extremity of the testicle, the organ being dragged down as far as possible, and separated from the other, winding it very tightly around the spermatic cord and apex of the tumor, to prevent it from slipping up through the first turns of the dressing. This tendency on the part of the testicle to slide up through the dressing of strips is very great, and must be guarded against in the application of the compressing medium. If it is found that the first strip of plaster does not obviate this tendency, it may as well be taken off at once and another tried, exercising in the trial greater precaution. The pressure upon the superficial veins of the scrotum, produced by the first few strips, may interrupt the circulation in them until the tumor is entirely enveloped, but this will do no harm. The adhesive strips are apt to become somewhat disarranged, the scrotal integument sliding into folds. When this occurs, the tumor must be dressed anew, a process which may be required every other day. This treatment may be continued for two weeks, when some medicated application may be used for as long a period, the processes alternating. The local medication may be conducted by applying to the enlarged testicle a plaster of the extract of conium, with which a grain of strychnia to a drachm of the former, is mixed. The plaster spread on soft leather is to be kept in place by the suspensary bandage, which is to be worn continually, let the other treatment be what it may.

The compressive influence of the adhesive strips will excite so much absorption that the tumor will become softer, and the sensibility more like the gland in its normal condition. The local medication serves to restore the nervous and vascular functions of the testicle.

To give variety to the treatment in case the patient becomes very uneasy, and is clamorous for change of treatment, a solution of a chloride or of the muriate of gold,—two grains to the ounce of water—may be used; or the iodide of potassium—ten grains to the ounce of water—may stimulate to action the absorbents of the testicle, as well as satisfy the caprices of the sufferer. I have made use of various preparations of iodine and other agents, which have sustained the reputation of being stimulants of the absorbent system, but never with very marked signs of improvement. A warm hip-bath, taken for twenty minutes, once a day, seems to operate beneficially; I have made use of currents of galvano-electricity, but as I tried them in connection with other agencies I am not competent to speak of their effects alone. I sent the currents through the gland in various directions, without regard to rules; also from the lumbar region to the gland. The patients remarked that the testicle felt lighter and more natural after the applications.

TREATMENT OF MENORRHAGIA.

BY N. HASTINGS, M. D.

In my practice I often meet with cases of profuse menstruation. Frequently a young woman informs me that she has her *turns* every two or three weeks; that they continue five or six days each time; that the pain attending these periods is severe; and that the flow is irregular, yet so copious as to reduce her strength very decidedly. Upon inquiry among physicians I ascertain this to be a common difficulty among their female patients. Continuing this "important method of obtaining knowledge"—always esteeming it very profitable to all concerned to freely interchange the results of individual experience and observation, I was able to obtain from some half dozen of my intimate brethren, their most successful or efficient remedies used in the derangement above referred to.

From the condition of a majority of the menorrhagic cases that have been the subject of my attention, I am satisfied that women of a slender physical constitution, are those who particularly suffer from these immoderate flows. A state of anæmia exists, the blood not having sufficient consistence to prevent its ready transudation through the minute uterine vessels.

I have found a few females suffering with menorrhagia who were seemingly of a plethoric habit, their cheeks appearing flushed, and their body rotund; yet upon inquiry it would be ascertained that such persons had not strength and endurance enough to indicate a predominance of the solid portions of the blood, which is supposed to be characteristic of plethora. The appearance of health is not an absolute assurance of it. A small proportion of the solid constituents of the blood, makes a good show through a delicate skin. The plethora in menorrhagic cases is more apparent than real, and the treatmont is to be conducted accordingly. One of my competitors, however, who regarded a case of the kind, as depending upon fullness of the vessels, abstracted blood from the arm, and leeched the os uteri. The consequence was, that alarming hemorrhage followed the bites, as well as a high grade of metritis. Some years ago I used astringents internally, in cases of profuse menstruation, but obtained little success. Later I made use of the oxide of silver, giving it in grain doses, three times a day, between the menstrual periods, adding ergot when the flow came on. In this way I affected some cures, and improved others, but I failed to obtain entirely satisfactory results until I gave bebeerina. This I prescribe in the following recipe:

℞. Sulphate of bebeerina, grs. xii.
[Pulv. cinnamon, grs. xviii.
" iron, grs. vi. M.

and divide into twelve papers. One of these to be taken every other day. Under the action of this, no patient affected simply with menorrhagia, has failed to recover. If an immediate flow depend upon polypus, cancer, or other analogous disease, the above prescription could not be expected to afford relief.

I have used the bebeerina alone, and in various combinations, and am fully convinced that it has a specific action in the disease for which I have recommended it. In case there be leucorrhœa and prolapsus uteri, the repeated influence of a galvanic current is valuable. Many of what are called active emmenagogues do not produce a favorable effect upon the disease. The bitter tonics do much better. The late Prof. Gabbert, of Memphis, was accustomed to extol unicorn as a remedy in menorrhagia. He also recommended wild cherry bark, and uva ursa, for the same complaint. I used to make a very pleasant cordial of a strong tincture of these agents, and found it valuable in debility of the female, whether a profuse menstrual flow existed or not.

EDITORIAL DEPARTMENT.

BATHS.

THAT there are many ideas which from time to time have been received as *facts*, established beyond a querie or rational doubt, but which farther investigation and more accurate knowledge have demonstrated to be erronious and without any foundation, will be admitted by all.

We congratulate ourselves that *we* are not subjected to the erronious notions which were revered as time-honored and well established by the profession in former times; and trust we have not adopted any opinions except such as are capable of demonstrative proof. But it may be well for us even at this time, to again examine our opinions and the foundations on which they are based; and perhaps we shall find occasion to modify those opinions in some regard, while in others, it is not impossible that we shall discover we have been altogether in error.

Among the therapeutic appliances which have recently been and are now being put to a severe and rigid re-examination, is that of *baths.* As long ago as in 1854, and 1855, Dr. J. Lehmann, a namesake to the author of Physiological Chemistry, commenced a series of experiments which he conducted with extreme care, for the purpose of determining the actual effects produced by baths upon persons in health. Dr. Neubauer, and Prof. Radiche, Drs. Genth, Beneke, Wundt, Nasse, Homolle, Kletzenski, Durian, Braune, Durand, Musset, Poulet, Spengler, Sieverking, Wiedash, and others have contributed by means, of their experiments and observation, to our knowledge of the influence of baths; and recently Frédéric Durian has reported a series of experimental researches of great value. While the experiments and researches of these physicians have not pointed to absolute and positive conclusions in every instance, they have done much toward establishing positive and absolute results. Of these there are some, which, having been observed by many, and always found to be of a uniform character, may be considered established almost, if not quite, beyond cavil or doubt.

Absorption. Repeated and carefully conducted experiments have determined, where the fluid is *colder* than the person whose body or limb is immersed in it, that absorption of water takes place through the skin into the system; and that the amount of fluid thus absorbed will depend upon the length of time the part is immersed, and also upon the amount of difference of temperature between the bath and the person taking it. The results, however, are not invariable, as other conditions of the system modify the amount of absorption.

The absorption following a cold bath appears, in part, to be due to the fact, that cold produces a recession of the fluids within the cutaneous and subcutaneous vessels; and as those vessels and the adjacent tissues are emptied of fluids, the water of the bath can pass in to take their place.

When the bath is warm, the fluids are still retained in the vessels and fill them and *no* absorption takes place, but on the contrary, under the influence of a warm bath, or where the fluid is warmer than the person immersed in it, the cutaneous exhalation is increased; and after such a bath, it is found that the bather has less weight than before the bath was taken.

Absorption of medicines. Experiments were commenced with the idea that medicinal and other substances could be introduced into the system by immersing the body in a fluid containing them in solution. But, contrary to the expectation of all who have tried the experiments, which have been very many times repeated, *not the slightest traces* of acids, alkalies, or other substances in the bath, can ever be detected in the fluids or excretions, or by any medicinal impression they have made upon the system of those who have been exposed to such medicated baths.

Water enters the organism when applied cool or colder than the system; but iodine, iodide of potassium, ferro-cyanide of potassium, carbonate of potassa, common table salt, nitrate of potassa, sulphate of alumina, nitric acid, sulphate of quinia, belladonna herb, digitalis, and other substances, have been added to baths, and persons have been kept in those baths one and two hours, without any evidence being observed that the smallest possible quantity of such substances was absorbed. This accords with the experience of those who have been exposed to the saline waters of the ocean. Such persons have observed that the *water* absorbed has tended to allay thirst, and in no instance has exposure to saline waters added to the thirst, as must have been the case if the salt was absorbed along with the water.

From repeated experiments, conducted with great care, as has been said, it now seems fully determined:

1. If the bath is *below* the temperature of the body of the bather, absorption of water alone, takes place.

2. If the bath is *above* the temperature of the body of the bather, no absorption takes place, but the body loses moisture by cutaneous exhalation.

3. Medicines can not be introduced into the system by means of general baths either cold or warm.

Influence of baths upon the temperature of the body. Every individual has what may be termed his own *natural temperature*, which, while it is near the temperature of the person of another, cannot be indicated absolutely, by any degree on the scale of the thermometer. The natural temperature of no two individuals will be absolutely the same; and with the same person, it varies with the changes of life from day to day and year to year, usually ranging from 90° to 94° *Fah.*

From repeated experiments to determine this matter with accuracy, it was determined, as was to be anticipated:

1. When the bath was of the *natural temperature* of the bather, no change in the amount of animal heat was discoverable.
2. When the bath was *colder* than the natural temperature, the thermometer, whether held in the hand or placed in the axilla, indicated a loss of animal heat equal to two or more degrees of the scale.
3. When the bath was *warmer* than the natural temperature of the bather, the animal heat was *increased* two or more degrees.

Influence of Baths upon the Respiration. One of the most marked changes observed to follow entering a bath, even in those who care but little in regard to the matter, is a notable degree of difficulty and labor in breathing. This difficulty of respiration occurs with remarkable uniformity whether the bath be cold, or warm, or at the natural temperature of the bather; whether the patient be nervous or otherwise; a child or an adult, male or female, or of a plethoric, or anæmic habit.

The cause of this phenomenon may not be easy of determination, but its presence is found to be certain and uniform. It appears to be a kind of sudden suffocation, with a labored, difficult, and anxious respiration; a sensation of weight, pressure, and constriction the entire length of the sternum, but most marked about the lower end of that bone. This difficulty is experienced, whether the patient be upright or reclining; but is always more painful when but little or no muscular activity is indulged in. It has been observed:

1. Baths at the natural temperature of the bather cause this dispnœa, but the difficulty subsides as the bath is prolonged; and the breathing becomes deeper and more natural.
2. When the bath is *below* the normal temperature the cold water lessens the breathing by two, three, or four, respirations in the minute, and the difficulty of breathing does not leave the person during the entire duration of the bath, unless active muscular exertion is indulged in.

3. When the bath is *warmer* than the bather, the difficulty of breathing also continues with scarcely any diminution during the entire time of its application, but does not cause quite so much difficulty of respiration as the cold bath.

Influence of baths on the circulation. But little attention has been paid by many who are in the frequent practice of ordering baths, or by those who are connected with what have been called "Water Cure" establishments, to the effects which baths produce upon the circulation, and upon those important organs which are greatly affected by the condition of the fluids of the body.

It has been, however, a matter of careful study by those who have recently conducted the experiments here referred to, to determine with definiteness the influence of baths upon the circulation; and the results obtained have amply repaid the labor and care of the investigation. The experiments have determined:

1. When the bath is at the natural temperature of the bather, on first entering the bath the pulse is accelerated, which doubtless is in part if not wholly owing to the difficulty of respiration already referred to. This acceleration of the pulse, although at times equal to from fifteen to twenty-five beats in the minute, is of quite short duration, seldom lasting more than ten minutes in those experiments where the bath is at the natural temperature. As the pulse in these baths, as well as the respiration, is less permanently affected than where the fluid is either warmer or colder than the bather, as well as for other reasons not properly considered here, this temperature is usually much more beneficial than when the fluid is either warmer or colder than the body.

2. When the bath was *colder* than the natural temperature of the bather, the pulse at first may be slightly accelerated, but soon it is depressed from ten to twenty beats in the minute, and the pulse is *smaller*, and the action of the heart, although labored, appeared weak and unsteady.

Congestions of the internal organs are quite constant as a sequel to cold baths, and are almost sure to be present unless active muscular exercise is taken in conjunction with the bath. These congestions as the result of cold bathing, are so constant and so severe, (as secondary affections,) that M. Pallen remarks: "We insist upon it, not without some reason, that it is of the highest interest to witness the dangers of an immersion in cold water."

Most of the experiments to determine the effects of baths, both cold and hot, were made upon animals. But enough were made upon man to determine the effects with accuracy.

The first observed change, from immersion in a cold bath, was a sense of *freshness* and cold, followed by a discoloration of the skin. The blood receded from the surface, so that the superficial veins disappeared. The pulse was lowered and lessened in frequency. A cold bath seldom allows of even a slight reaction; but if the person be not previously heated by walking, the chill produced by the bath becomes quite painful, but after a little the depression produces numbness of the nerves, with more or less inability of motion in the limbs.

If the bather remains in a cold bath fifteen or twenty minutes, and does not engage in muscular exercise, a supra-orbital cephalalgia is felt, caused by cephalic congestion, which for the time is very painful, and may produce *permanent* dilation of the blood vessels, or even a rupture of those vessels and cephalic apoplexy.

In *very* cold baths, a violent chill, followed by supra-orbital and fronto-parietal cephalalgia and an immediate acceleration of the pulse, was observed. The skin became pale and discolored, and a general numbness was experienced; and the effects were so powerful as to preclude the prolongation of the bath. Upon leaving the bath, the numbness continued, the eyes were hollow, the mucous surfaces blue, the skin in spots was of a violet hue, and the pain in the head continued twelve hours.

The effects of cold baths were so unpleasant, and fraught with such danger, that the continued experiments were made upon animals. One produced congestion and hemorrhage of the lungs One dog died in the bath, whoes autopsy revealed congestion of the left lung and traces of recent hemorrhage in the right, with a frothy foam in the trachea. Another died in forty minutes, with congestion of both lungs, injection of blood in the membranes of the nervous centres, and hemorrhage into the brain. In each instance these symptoms were observed to follow immersion in cold baths *without* muscular exercise; and hence the advice is given, and insisted upon, to take exercise, even to fatigue, before a cold bath.

3. Baths above the natural temperature of the bather. At the moment of immersion in a warm bath, the action on the circulation produces painful headache, with heaviness in the frontal region, and pain in the head more manifest with every movement of it. Quite soon there is trouble of sight, first appearing as difficulty in moving the eyes; soon there appear brilliant concentric circles which mingle with each other, when they suddenly disappear to give place to visual darkness, upon which, often, a red cloud seems to spread itself. After this, a difficulty of distinguishing the precise form, and more particu-

larly the distance, of objects is observed. As a cool current of air directed to the head relieves these difficulties of vision, it is natural to suppose them to be caused by cephalic congestion.

After the bather has remained a little time in a hot bath, the heart is observed to beat with violence against the thoracic wall, while the pulse is increased twenty or thirty beats in the minute. A few minutes longer exposure to a hot bath, in addition to these phenomena, there is observed not only a difficutly of vision, but a difficulty of audition, accompanied with a dull buzzing between the thumping sounds of the beating of the arteries. As dangerous cerebral congestion threatened, the bath was not continued but nine minutes. During half hour following the bath, there was embarrassment of locomotion, and heaviness of the head. The apoplectic symptoms continued during the day, with somnolence at night. The next day the pulse was observed to beat twenty to thirty times in the minute more than usual.

These experiments were repeated, but in no instance could a warm bath be endured of more than ten minutes duration, on account of the severe *congestional* troubles which it induced. The symptoms of congestion were constantly observed in each experiment.

To determine with certainty the effects of a prolonged warm bath, experiments were made with animals. In one instance the animal died after remaining in the bath twenty-five minutes. On examination, the left lung was found congested, and a sanguinolent froth filled the bronchiæ. In another, death occurred after thirty minutes. There was very decided congestion of both lungs. In another case, there was engorgement of the lungs, with submucous hemorrhage of the intestines.

An instance is on record, of a person who died soon after taking a hot bath, and on *post mortem* examination, the lungs were found gorged with blood, and the pericardium distended with a large quantity of fluid which had escaped through a rent in the anterior wall of the left ventricle of the heart.

The conclusions may be arrived at, from the experiments that have been made:

I. Baths at the normal temperature, and not long continued, if taken with and after muscular exercise, produce but little hurtful change on the circulation.

II. Cold baths, unless accompanied with much muscular exercise, or following active exercise, produce congestion of the internal organs and the brain and nervous centres ; and the congestion of the brain is not only quite marked, but produces apoplectic symptoms and death, if the liquid is quite cold, or prolonged beyond a very few minutes.

III. Warm baths also produce congestion of the internal organs and the brain, but not as marked as those which follow the use of a cold bath. But the effects produced upon the lungs and heart are greater than those of a cold bath, that there is always danger of hemorrhage into the splancnic cavities, and particularly into the thorax.

The influence of baths on the secretions and excretions, as well as saline baths, sitz baths, packs, etc., although of interest, cannot be considered at present.

BOOK NOTICES.

The Microscopist's Companion ; A Popular Manual of Practical Microscopy. Designed for those engaged in Microscopic investigation, Schools, Seminaries, Colleges, etc., and comprising selections from the best writers on the microscope, relative to its use, mode of management, preservation of objects, etc.; to which is added *A Glossary* of the principle terms used in Microscopic Science. By John King, M. D. Illustrated with one hundred and fourteen cuts. Cincinnati. O. Rickey, Mallory & Co., and Robert Clarke & Co., 1859.

The value of the microscope is particularly appreciated by medical men. Every department of medicine has been enriched by the developments of this instrument. With it not only have there been signal discoveries in all the lower forms of animal life, but the most reliable histological knowledge of the higher forms, has been obtained through its agency. The Anatomist owes much to the microscope, and the Physiologist scarcely less. The instrument has enabled the former to examine the minute structures, and the latter to observe the blood circulating in the webs of frogs and bats, in the tails of tadpoles, the allantois of the embryos of lizards and snakes, the germinal centre of the incubated egg, and in the branchial fringes of the newt and water-dog.

With the microscope the Pharmaceutist is enabled to estimate the quality and worth of drugs, as well as to detect adulterations. The Pathologist makes use of the instrument to examine morbid specimens. Often urinary deposits are to be closely observed; the *vomitus* of persons laboring under obscure gastric affections ; and an abnormal growth suspected to be cancerous. Pus is to be distinguished from mucus ; and glandular and other tissues, suspected of certain species of degeneration, need careful inspection.

The Medical Jurist, by the assistance of the microscope, can often give the strongest evidence in regard to the innocence of an accused party. He can distinguish the blood of man from that of other animals by the size and appearance of the corpuscles ; he can discover poisonous crystals, and make an accurate comparison of those found in the contents of a stomach, and others that may be discovered in some suspected mixture; he can distinguish the difference between a seminal and other stain upon linen and similar fabrics, in cases of alleged rape; he can often determine from what source a wad was derived, that is found in or about the body of a man killed by a gun-shot wound; in fact, there is no end of cases that might be cited to show the importance of microscopical examinations in cases that come up for legal investigation.

The physician, in his daily duties, needs some of the simpler forms of microscopes to settle many questions that may arise. A parasitical or vegetative production generally demands a closer examination than can be given with the unaided eye; indeed, a thousand occasions render the worth of an instrument incalculable to the intelligent practitioner. To students of natural science, "there is no instrument" says Mr. Ferguson, of Edinburgh, "which has been more largely or more rapidly productive of most valuable results than the microscope. There is scarcely a region of the world, or an element of nature; scarcely an art or science—scarcely an atom of unorganized matter—scarcely a sea-weed or fern of the Silurian or Red Sandstone systems, onward to the loftiest dicotyledon of our forests and gardens—scarcely an organ or tissue of animal, from the humblest crustacean or mollusk up to man 'monarch of all,'—upon which the microscope has not fixed its clear far-searching eye, and by which it has not triumphantly proved its powers."

Some parts of the ocean are alive with microscopic organisms. Certain species, persevering in their architectural labors, have built from the bottom of the sea submarine mansions, which in the aggregate are of such massive proportions that they reach the surface of the water. Upon the summits of these mud and drift are deposited until substantial islands are formed, and take important positions in empire. The nature, design, and extent of the labors of these minute creatures could not be ascertained without the aid of instruments that give visible proportions to such objects.

The "showers of dust" occasionally precipitated into the Mediterranean sea, were once supposed to be blown from the deserts of Africa. Prof. Ehrenberg demonstrated by the infusoria found among the particles of "rain-dust," that these showers came from the parched districts of South America, the particles having been taken up by whirlwinds and borne by atmospheric currents across the Atlantic. The importance of the observation depends upon its determining for nautical and scientific purposes, the direction of certain tropical winds. But to enumerate all the uses of the microscope would require too much labor and space. Besides, it would be a work of supererogation, as the educated are already familiar with the general utility of the instrument.

Until the present there has been the lack of a proper guide to the student in his early attempts at understanding the manipulations of a microscope. He might obtain a costly instrument, and several works on the subject of microscopy, yet a labyrinth of difficulties was still before him. There was no *Manual* adapted to his immediate and prospective wants, though there was quite an array of works for the accomplished microscopist. In the "Microscopist's Companion" the *beginner* will find all necessary directions for easy and rapid progress. The author, having seemingly kept in remembrance the impediments to his early labors, has constructed a chart, as it were, by which all obstacles to microscopic investigations may be avoided.

The *Glossary* forms an important feature in the work. The principal terms used in microscopic science are defined much more fully in this than in any other work, and many of them are not to be found in ordinary lexicons.

The numerous *Illustrations* are beautiful and instructive. The mechanical execution of the book is free from objections. The work is well adapted to the objects for which it was designed.

EDITORIAL ABSTRACTS.

Pediculi pubis.—These parasites can be destroyed in a few minutes, by applying to the parts infested, a solution of the cyanide of potassium. A drachm of the salt to a pint of water, is strong enough to destroy the vermin, and is not so strong as to irritate the skin, or do mischief by being absorbed. One application is sufficient to kill all that may be present at once. As others hatch from the ova, they must be treated to a repeated application. The use of unguentum hydrargyri, infusions of tobacco, and whale oil—remedies hitherto oftenest employed—is disagreeable, and not unfrequently attended with distressing consequences.

Milk Sickness:—Its treatment.—Dr. F. R. Waggoner, in an article upon this disease, states that he has treated many cases with uniform success, having in no case lost a patient laboring under this malady. He says that the indications in treating the disease are: *first*, to allay the irritation of the stomach: *second*, to evacuate the bowels: and *third*, to sustain the strength of the patient. The *first* indication he thinks is best fulfilled by the administration of sulphate of morphia, together with soda-powders, and the use of counter-irritation over the præcordium to arrest the vomiting. The *second* he accomplishes by the use of mild, *not* drastic, cathartics, as castor oil, rhubarb, and salines; as sulphate of magnesia or tartrate of soda and potassa. In regard to the use of mercurials he says; "A few years ago mercury was used to a great extent, but always attended, I believe with bad results."

After allaying the irritation of the stomach and opening the bowels, he resorts to tonics and stimulants, giving sulphate of quinia in large doses, say five grains every three hours. Of medicines he considers the alcoholic preparations the best in this disease, and states that patients will take large quantities without experiencing any intoxicating effects.

Belladonna as a Prophylactic in Scarlet Fever.—Dr. Chase, of Mass., in a communication to the *American Homœopathic Review*, on this subject, says: "I need not detain the reader with a recital of the failure of belladonna, *which might be done almost indefinitely.* * * Not only has it not prevented the disease, but to the minds of many physicians, it has seemed a positive injury." He explains this constant failure, by showing that the symptoms of the disease as described by Hahnemann under the name of Scarlatina, are *not the same* as those known by the same name at the present time.

MISCELLANY.

ASTHMA.

Prof. Trousseau, a Parisian savan, has been delivering a series of lectures in the Hotel Dieu, on Asthma. Having suffered with the disease for a long time, he regards it as a *nervous* affection, and not dependent upon any change of structure in the lungs, or air passages. According to his views, climate and locality have a decided influence upon asthma in a majority of cases, yet like all nervous disorders this has its freaks. One patient may experience relief in a low damp situation, while another can exist only in mountainous districts, and where the atmosphere is dry. He remarks, that low places generally agree best with asthmatics. Cigarettes made of the selected leaves of stramonium, when smoked, afford relief; and those who cannot use the medicine in this way, may experience nearly the same relief by remaining confined in a room where the dry leaves have been burned. The respiration of the strong antispasmodic smoke lessens the severity of the suffocating paroxysms.

Common unsized paper dipped in a strong solution of nitrate of potassa, then dried and rolled into the form of cigarettes, may be used by asthmatics like ordinary cigars. If this method of taking the smoke be not agreeable, the paper may be rolled into a ball, and burned, the fumes being collected by the expanded extremity of a tunnel, and inhaled by the patient placing his lips to the nozzle.

In some cases Trousseau combined the two methods of treatment, by rolling the stramonium leaves in nitre paper, having learned by experience that peculiarities of constituion greatly influence the course of medication to be pursued.

An asthmatic sea-captain found that he never suffered from his old difficulty while his ship was carrying guano. This circumstance led Ducras, Dr. Vidal, and others, to suspect there might be something curative in ammoniacal vapors; and they instituted a series of experiments to ascertain the value of the suspicion. The results of the investigations were so favorable that ammonia in various forms is now considered a useful medicine in the treatment of asthma. The general opinion among medical men is, that no system of medication will afford any but temporary relief in this distressing affection.

ECLECTICS—BOTANICS.

"Please let me know if there is a difference between the meaning of the words "*Eclectics*," and "*Botanics*," as used by Medical men?

The above querie from one of our subscribers, perhaps demands attention. When old school physicians depended mainly on medicines of a mineral origin in the treatment of disease, those who did not practice according to the received orthodox teachings, but made free use of medicines prepared from vegetables, were deridingly called *Botanics.*

As the new method of practice became popular, those who adopted it accepted the term which had been applied to them in the way of reproach, and called themselves Botanics.

In some instances no medicines except those from the vegetable kingdom were made use of by the so-called Botanics, while in others, even where the name was retained, medicines from other sources were used;

and hence the term was a mis-nomer. At the present time but very few strict Botanics can be found among medical practitioners.

Eclectics so-called by themselves and others, are those who have in principle and in practice, protested against the exclusive dogmas of both those known as Allopaths and Botanics. They have never submitted to be called by any term indicative of exclusivism, but they understand the term in the light of a protest against exclusive opinions and modes of practice, and an avowal of individual freedom and independence in both opinion and practice.

Eclectics have never been, and have never claimed to be Botanics, although in some regards they may entertain opinions in common with them, as they also entertain other views which are held in common by most physicians.

NEW HOSPITAL IN NEW YORK.

Another Hospital has been established in New York, a city already well supplied with institutions of the kind. It was founded and endowed by Episcopalians, though its medical and surgical staff has been filled without regard to sect; and is open to patients of every denomination. The peculiar characteristics of St. Luke's Hospital (for that is its name) are, that religious services are conducted in its chapel every Sunday, and prayers read daily at noon; and the nurses all of them having had much experience as such, constitute a sisterhood of Protestant ladies, which, though a novelty in this country, is like the well known protestant female associations of Europe.

The Hospital at present will easily accommodate two hundred patients, who may be deserving of charitable medical and surgical attention, and promises to do an infinite deal of good.

INDIANA ECLECTIC MEDICAL ASSOCIATION.

The *Annual Meeting* of the Eclectic Medical Association of the State of Indiana, will be held at Indianapolis, May 24th, 25th and 26th. The Association is fully organized, and at this Meeting officers for the ensuing year will be elected.

The *second day* will be devoted to the reading of original communications on the science of medicine.

It is very desirous that the reformers throughout the State of Indiana, should meet their brethren in council to further the good cause of Medical Reform. Brethren from other States are invited to attend. By order of the Executive Committee. J. Pope, *Cor. Sect'y.*

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ORIGINAL CONTRIBUTIONS.

DYSENTERY.

BY PROF. C. H. CLEAVELAND.

Perhaps there is no form of disease more frequently met (with the exception of ague and fever,) in the South and West, than Dysentery; and it is also quite frequent in the summer and autumn in other parts of the country.

The annual appearance of the disease, and its painful and dangerous character, have led medical men to give a large share of attention to its study and investigation, and to the publication of frequent articles in regard to its pathology and treatment; so that there are already before the profession a multitude of ideas, both as to the nature and cause of the disease and the modes of treatment pursued by different practitioners.

The College Journal has been already favored with its full share of communications in regard to this malady; and only at the earnest and often repeated solicitation of friends, do I presume to intrude the subject again upon its readers.

Symptoms.—As the word *Dysentery* may not be understood by all in the same sense as used by me, I prefer to give a definition, and in the following words:—Dysentery is a disease manifested by a peculiar and severe pain, mainly confined to the rectum and colon, recurring in paroxysms of tormina, and each paroxysm is usually followed almost immediately by discharges from the bowels, of a vitiated, jelly-like mucous, or muco-sanguinious, or muco-purulent matter, small in quantity, but accompanied with severe straining at dejection, and with a sense of soreness and swelling and pressure in the rectum.

The discharges may present a variety of appearances, owing either to the stage of the disease, the extent to which it has progressed, or the treatment that has been adopted. Some do not apply the term *dysentery* to a disease unless there is a discharge of blood. But it is evident that if the mucous membrane and the walls of the rectum are inflamed, an increased discharge of mucus may follow; and the presence or absence of blood must be owing to the condition of the congested blood-vessels, and is not an essential feature of dysentery. At times the larger and distended blood-vessels are ruptured, and profuse hemorrhage ensues; so that the dejections are composed almost entirely of blood, either fresh, if recently poured out of the vessels; or clotted, or even partially decomposed and putrid, if it has been retained in the rectum a sufficient length of time to admit of these changes. In the later stages of the disease, if protracted, the disharges have frequently a granulous appearance, or as curd or lymph floating in a thin serous fluid, in which fluid may also be observed blood or pus.

On examination, the mucous membrane of the rectum is found red, inflamed, congested, very tender and painful to the touch, and after a little time, denuded of its epithelium, and perhaps ulcerated. *Post mortem* examinations show that the inflammation is not confined to the rectum, although it probably commences there; but extends to, and in some cases involves, a considerable portion of the colon.

Along with the inflammation and tenderness and tormina, with frequent but small dejections from the lower portions of the alimentary canal, there is often a dry, inactive, or constipated condition of the small intestines, which leads to an almost entire suspension of the fecal discharges; or the feces are voided in small hard masses as they have passed into the colon, the passage being accompanied with unusual effort and pain.

Although a constipated condition of the upper portion of the intestines is usual in dysentery, it is not an essential accompaniment of the disease; for at times, the evacuations may recur as usual once or twice a day, and only modified in appearance or quantity as it may be supposed they would be under the influence of the medicine and food of sickness, and not by the peculiar diseased condition of the large intestines. The constipation of the upper portion of the alimentary canal, when present, demands special attention in the treatment of dysentery.

The *Fever* present in this disease, varies in character with the variation in cause, and the duration, intensity, and extent of the local inflammation. When the dysenteric symptoms are produced by the inhalation or absorption of emanations from human excrements, as is often the case, the changes in the blood may precede the local diseased manifestation and present the peculiar form and aggravated character observed in fever from the same or a similar cause when the local difficulty is not manifest.

When an epidemic of dysentery occurs in camps, cities, or in a close collection of huts bordering upon a public work ; or in a newly settled country, where proper care is not taken to cover up or convey to a distance the feces and other human excrements, and the waste of animal and vegetable food, it will often be observed that the impurities which fill the air and enter the system by respiration, or by the water drank, will produce dysentery in many, while others will have a febrile form of disease resembling the fever of the dysenteric patients, and yet will not have any dysenteric discharges from the bowels. This fever is called Typhus, and in some instances is very severe and fatal; and it is proper to call the fever in dysentery which has an identity of cause and of manifestation by the same name; hence such cases of dysentery are called *Typhus Dysentery.*

But the disease occurs nearly annually in localities where the heat of summer produces relaxation and debility of the digestive organs, and there is also decaying vegetable matter acted upon by heat and moisture ; or in regions where miasms are generated, and miasmatic diseases abound. As miasm, if not too powerful, produces ague and fever, or intermittent and remittent fevers, as well as dysentery, it is very common to observe a similar periodicity or intermittent character manifested in the fever which accompanies dysentery to that which obtains in those cases when the alimentary canal is not specially involved ; hence this form of the disease is often called *Periodic Dysentery.*

When the febrile excitement is caused by a specific poison acting in the blood, which gives rise to a peculiar set of symptomic manifestations, and the same causes also in some instances give rise to dysentery, it has been customary with some writers to give the same name to the dysentery which is given to the fever. When dysentery is caused, as has been shown, by emanations from human excretions, or by miasmatic exhalations, it is called Typhus, and Periodic, and when caused by famine, or destitution, or starvation, it may be called *Relapsing Dysentery.* If resulting from organic matter in a peculiar state of decomposition such as produces Typhoid Fever, it might properly be called *Typhoid Dysentery.* In these cases the fever accompanying the dysentery would closely resemble the fever produced from the same causes when dysentery does not present itself as a complication. It may be doubted if the term Typhoid, as applied to dysentery, is even proper. Theoretically it might possibly be anticipated that those causes which produce typhoid or *Enteric* fever will produce dysentery. Yet of all the cases of typhoid fever reported by Louis, Flint, Bartlett, and others, dysentery has not been present in a single one; and if never present in typhoid fever, the inference may be drawn that typhoid symptoms are never or seldom manifested in dysentery, and experience and observation demonstrate such to be the fact. The febrile manifestations are often valuable as a guide to special modes of treatment.

The peculiar cause of dysentery, of whatever variety, appears to have first a lodgement in the blood and to produce changes in that fluid, with a tendency to decomposition, which gives rise to the febrile symptoms. After the local intestinal disease has progressed in extent or duration, it doubtless supplies, by means of the secretions formed and again absorbed, and by the direct action of the inflamed solids upon the fluids flowing through them, additional materials, which act upon the blood to produce changes in it. In this disease, therefore, as well as in small pox, and other disorders where the solids and semi-solids are inflamed and in part reduced to fluids, there is manfested a *primary* and a *secondary* fever. The primary fever caused by the introduction of poisonous material from without; and the secondary, from the absorption into the circulation, destroyed and liquified matter, which in health was a part of a solid or semi-solid organ or tissue.

The continued presence and absorption of the *materies morbi*, may cause a continuation of what is styled the primary fever, after the disease has so progressed that the local derangement furnishes material for the secondary fever; and this primary cause of the difficulty must be removed or guarded against, not only during the continuance of the disease, but during convalescence, and afterward. When the cause or causes cannot be removed, nor the patient conveyed beyond their influence, it is very difficult, and at times impossible, to make a speedy or permanent cure.

The Nerves. The presence of the initiating *cause* of dysentery in the blood not only produces those symptoms which the entire profession has denominated febrile, but it also by contact produces impressions on the nerves, which impressions will be modified by the previous condition of the nerves, their impressibility by the cause of the disease, the quantity of this morbid material in the system, the length of time it circulates and comes in contact with the nerve substance, and perhaps by the treatment adopted.

We know that opium and other narcotics, continue their impression upon the nerves as long as they continue to float in the blood; and that the only sure and speedy method of relieving the patient of the harmful influence of an over-dose of opium or any other narcotic medicine, is by aiding its elimination from the system, or by the administration of something capable of changing its character and rendering it harmless, while the nerves are roused to act against the poison by other appropriate measures.

In dysentery, the nerves are greatly influenced by the morbid material brought in contact with them through the circulation, as is evidenced by the condition of the mental faculties, the spinal irritation, but more particularly by the want of appetite or hunger, and the torpidity, inactivity, and consequent dry and constipated condition of the liver and small intestines; a condition which is sometimes overlooked, but nearly always present, and which demands special attention in treatment.

Those nerves which control the vegetative life of the splancnic organs, and of the abdominal viscera in particular, appear more involved than those under the control of the intellect or will. The spinal cord may be affected, but the ganglionic portion of it most, and this affection of the ganglionic nerves, in part, leads to the almost constant presence of an inert, debilitated, and constipated condition of the small intestines, with the loss of appetite, nausea, and perhaps vomiting, when the stomach also has become considerably involved.

Treatment. From what has already been written, it will be seen that there are several indications in the treatment of dysentery, and each must be so managed, if possible, as not to unfavorably interfere with the others.

To overcome the fever and expel or destroy the cause of it, may demand the earliest and most persistent attention. Where the fever and the local disease are produced from human excrementitious matter, as is often the case when people are congregated together in large masses for temporary purposes, as camps, etc., and which was formerly the prolific cause of the epidemics of large cities; and also in more recent times where cities are not supplied with water from outside their limits, but from wells into which the contents of privy vaults and drains must leak, as was emphatically the case with the cities of New York and Boston before the introduction of Croton and Cochituate water; it is always desirable to remove the sick from the infected locality.

That more confined localities can be poisoned in a smilar manner and produce the disease in a virulent form, is proved quite often from the observed effects following the inhalation of gases from privy vaults, imperfectly stopped drains, or the accumulation of garbage and impurities around manufacturing establishments of various kinds; as well as the annual prevalence of *summer complaint* among the infants of cities who play, sleep, and live in the heavy contaminated atmosphere of rooms incapable of being ventillated below the window sills, and perhaps supplied with air from an area or alley filled with the fumes of the vault, the sink, and any accumulation of filth.

A speedy removal from such localities, even without any medication, will often be all that is required. But however beneficial a removal may be known to prove, it cannot always be adopted. In such cases, as near an approach to absolute cleanliness and purity of atmosphere, of water, room, and person, as possible, must be enjoined; and all matters dejected must *at once* be removed entirely beyond the possibility of producing any impression upon the sick. As well might a susceptible person be exposed to the virus of small-pox with the hope of escaping infection, as a well person, but more particularly a sick one, be exposed to the exhalation from decomposing dysenteric excretions with the expectation of escaping unharmed.

Sulphate of quinia has a well-established reputation in ague, remittent, intermittent, and continued fevers; and ample experience has proved it to be as certainly beneficial in dysenteric fever and dysentery as in ague or remittent. Quinia not only allays the fever, but acts directly, as an antagonistic or destructive agent or the *cause* of the difficulty whatever may be its source or origin. It should be given in the earlier stages, frequently, and in doses such as the patient can bear and the disease demands. It should be given as long as the disease continues, or until the local inflammation no longer furnishes a morbid material to be absorbed and carried the round of the circulation. For a reason similar to that for which quinia is given in miasmatic fevers, it should be given in this disease; and its use should be persisted in as long as its presence in the blood is demanded.

Small doses do not appear to act as kindly as larger ones; hence five grains, once in two or three hours, or as fast as the system is capable of disposing of it, and repeated as many times as it appears to be demanded, will be found to answer far better, and require less of the salt, than when given in smaller quantities. Its use should be resumed often in the course of the disease, and it does not appear to interfere in any way with other remedial measures. The febrile or nervous symptoms which are caused by the morbid origin of the disease will disappear as this cause is removed; and frequently the entire train of morbid symptoms will be removed, and the disease be permanently cured by the early administration of a few doses of the sulphate of quinia. Even where the disease is not eradicated, its symptoms will be favorably modified and the final cure expedited by the use of this medicine.

The peculiar inflammation of the mucous membrane will demand attention. Ipecacuanha was first introduced to the profession as a specific in the peculiar inflammation of the mucous membrane of the bowels, or dysentery, caused by the introduction into the system of impurities in the air and water of the city of Paris. Quite recently it has again been employed on the ground that it exerts a specific influence on the alimentary canal, and it has proved to be exceedingly beneficial in many cases. It is given in doses of such size as not to produce vomiting or distressing nausea. It causes a flow of mucus into the small intestines, with an additional flow of bile, rousing the jejunum and ilium from torpidity; and often alone will overcome the constipation of those portions of the alimentary canal which frequently proves quite embarassing, and often a dangerous complication of the disease.

It is not necessary to give ipecacuanha in all forms of dysentery, for at times the upper part of the alimentary canal appears to be in nearly a healthy condition, and while there may be a discharge from the rectum once in an hour or two, there will be a natural fecal discharge once a day or so, with considerable regularity. But as has been said, the smaller intestines are usually in a constipated condition, and physicians have prescribed castor oil, sulphate of soda, sulphate of magnesia, and other cathartics to remove this constipation. Agents of this character may be demanded; but only seldom, if ipecacuanha, oil of turpentine, balsam of copaiba, or other appropriate means are resorted to, which are known to exert a specific action on that part of the intestines.

Benzoin, or the compound tincture of benzoin, has been commended quite highly as very beneficial in dysentery by Mr. Ellis and others; and it certainly is worthy of trial.

Balsam of copaiba has been supposed to have as beneficial an effect in dysentery, as in gonorrhœa and gleet. Dr. Cullen recommended it in both hemorrhoids and dysentery. Drs. La Roche, Meigs, and others have used it, and in some instances to the entire exclusion of other treatment; and while I would not willingly depend on it exclusively, I think it should be made use of in conjunction with other remedies far more frequently than it now is. Other balsams, as tolu and Peru, and the sweet gum of the South, as well as Canada or fir balsam, are also worthy of attention. Locally either or all of these, as well as creasote, applied as injections mixed with bland or shielding liquids, or with glycerine, will be found of great benefit at times.

Constipation. While the disease-producing agent is being destroyed in, or expelled from the blood by quinia, and the depression of the intestinal canal is being overcome by ipecacuanha, oil of turpentine, copaiba, the balsams, etc.; the fact that an obstinate constipation and retention of feces in the alimentary tube may still exist, should never be forgotten. And if such a condition is found to obtain, the bowels must be made to empty themselves of their contents; and a proper action must be maintained during the entire course of the disease. Probably a combination of oil of turpentine and castor oil, when it can be taken, will be found as good a laxative for this purpose as can be resorted to. At times it may be well to add a few drops of tincture of aconite, tincture of hyosciamus, or tincture of camphor to the oils. As the local inflammation has its seat in the lining of the alimentary tube, the disease *cannot be cured* while constipation is allowed to exist.

Injections. As has been hinted, applications can be made to the locality of the inflammation by means of rectal injections. These will subserve a variety of purposes, and when demanded, should be resorted to. Cold water will relieve the tormina and heat, cleanse away the vitiated secretions and discharges, and often aid in preventing constipation, even while they diminish the frequency of the dysenteric dejections.

Glycerine, gum, starch, mucillage, and other bland shielders, may at times prove very beneficial; and with these may be combined sedatives, antiseptics, astringents, or tonics, as indicated. Creasote, and the peroxide of iron often answer admirably in injections; the former when an antiseptic, astringent, and sedative is demanded; and the latter, when we wish to restrain hemorrhage, or other inordinate discharges from the lining of the rectum or colon.

Position. The patient should be kept as much as possible in a horizontal position, or with the head but slightly elevated. Standing or sitting favors the gravitation of blood to the inflamed organs, and at times, if indulged in, even after convalescense is well advanced, will produce a relapse of a grave character. Even while at stool, as little straining as possible, should be allowed, with the sittings prolonged only for the briefest possible time; and in all severe cases it should be prohibited entirely, the patient having an evacuation while recumbent. This is a matter of no small importance, and demands the most pointed and positive direction on the part of the physician.

External Applications. In common with all severe fevers, dysenteric fever is relieved by a free use of water, or salt dissolved in water, or alcohol and water, frequently applied to the surface by means of a sponge or cloth. These applications should always be at a temperature to make them agreeable to the patient; and not prolonged so as to produce fatigue, but repeated several times a day. Along the spine, and especially to the lower part of it, applications of a more stimulating nature may be made, than are desirable to have applied to the general system. Even mustard or oil of turpentine may be often applied with benefit to the lumbar region.

General Treatment. In the consideration of the treatment of such diseases and derangements as are confined principally to one organ or set of organs, there is a danger that the therapeutist may overlook the influence of a local disease upon the condition of the general system. Even when of but short duration and limited in extent, all local derangements impress the entire organism through their influence upon the nerves, the circulation, or otherwise.

Dysentery in one sense of the term, may be considered strictly local in its manifestation ; yet it involves the entire nervous and circulating systems in its influence to that extent, that it requires *general* therapeutic and hygienic attention ; and this general treatment is of no slight importance or influence in not only restoring the general health of the patient, but also in aiding to control the dysenteric manifestations.

The importance and value of *quietude* has already been named, and if it cannot be obtained by any other means, opiates, either applied locally by means of a suppository, or injection, or introduced into the system through the stomach would be used. Opium in its various forms and preparations, has proved of great value in dysentery, and mainly if not entirely on account of the rest and ease which has followed its administration.

Aconite possesses the property ot lessening the sense of pain, and also the activity of the circulation, consequently of active congestion, and in some cases is decidedly preferable to opium ; but it is not capable of lessening the secretions. And as opium is used by some with the mistaken idea that its main value in dysentery is derived from its power of drying up the secretions, or rather of putting asleep secreting organs and surfaces, aconite has not been allowed to take the place of opium as much as it should. In some instances, when constipation of the upper portion of the tube is a troublesome complication and hence the use of opium is decidedly objectionable, aconite will be found very useful.

Gelseminum, from its known power in subduing inordinate muscular irritability and contractility, in lessening the activity of the heart and overcoming local congestions of the mucous membrane in inflamed eyes, in gonorrhœa, and leucorrhœa, promises to be quite valuable in the treatment of dysentery. In Charleston, S. C., in the last epidemic of yellow fever, its great value in that disease was fully demonstrated. In New Orleans, also, it acquired an unusually favorable reputation. In dysentery it has not yet been fully tested, but has answered admirably in a few cases under my care.

Iron, manganese, and other blood-making agents are always required in the convalescence after dysentery. The loss of blood and other fluids, together with the absence of food, and the derangement of the digestive organs, produces an *anœmic* condition, which demands special medication. A want of appreciation of this condition leading to a want of proper attention, has allowed the stage of convalescence to be greatly prolonged, and in some instances, probably has prevented a favorable termination. In common, almost, with this class of medicines, may be ranked attention to diet.

Diet. The diet must be of the most bland and unirritating character, and yet sufficiently nutritious to sustain the vital strength of the patient. Beef-tea, essence of beef as it has been called; mutton, beef, or chicken broth, or better, a broth made from the meat of game; gruel, farina, and other liquid foods must be depended upon while the disease is active; but when convalescence has progressed, food of a more solid form should be used. Fruit in its season, fully ripe, and in proper quantities, will tend to keep up a daily evacuation and ward off the constipation which otherwise would cause a return of the disease. The main difficulty has been confined to the lower portion of the alimentary tract, and as the stomach and small intestines are not involved in the acute inflammation, there is no good reason why proper fruits and vegetables should be withheld. Attention must, at times, be paid to the condition of those who have suffered from this disease for weeks, after a fair condition of health is attained. Almost as an article of diet, a constant use of aromatic and bitter plants will be required, but they do not demand any separate mention.

As an attack of inflammation always produces debility of the organ affected, which debility may be of considerable duration, proper dietetic and hygienic oversight should continue some time after the active disease ceased its manifestation.

CHOREA—GALVANISM.

BY D. A. ROSS, M. D.

On the 20th of August 1858, I was called by Prof. Cleaveland to see a patient of his, a Miss E. C., aged about fifteen years, who was suffering from chorea of a very severe form.

Her mother stated that when about eight years of age she was frightened, which fright, as was supposed, produced symptoms of chorea, or as it is popularly called, St. Vitus's Dance, which affected her mind, and the mental difficulty remained pretty uniform until I saw her. The peculiar muscular jerking and irregularity of motion was quite varied in its manifestation, but much more apparent when the general health suffered. Although her system was as much developed as is usual in this climate with girls of her age, menstruation had not, and has not now, manifested itself.

At the time I first saw her she had suffered from the chorea in an aggravated form for four or five weeks. Her head was warm and remarkably tender to the application of the galvanic current. In the neighborhood of each ear and along the base of the brain, the tenderness was as extreme, apparently, as that of an inflamed eye-ball. The cerebellum was neither unusually warm nor tender. Her eye-balls were distorted, often turned in toward each other, but sometimes turned outwardly. The strabismus was extreme at times, but not permanent, or uniform in direction. There was great and irregular motion of the eyelids, together with *rolling* of the eyeballs, and each eye had apparently an action independent of the other.

The muscles of the face were constantly in motion, giving to the countenance a very unpleasant appearance. The tongue also was in motion, and a froth issuing between her teeth. Whenever she tried to articulate, the throat, tongue, and lips, would take on a greater activity than usual, but become so irregular in their action as to render her articulation unintelligable. Her arms and limbs were in such constant motion as to prevent her being kept in bed, and her mother was obliged to make a bed for her upon the floor, to prevent her injuring herself by bringing her limbs in contact with the bedstead, or in falling from it. During my earlier visits I was obliged to have assistance in holding her quiet long enough to make the application of galvanism.

At first she suffered from constipation; and the motion of her mouth and throat rendered deglutition very difficult, so that whether she had an appetite or not, (and her deplorable mental and physical condition rendered it difficult to determine that matter with certainty,) the amount of nourishment she received was quite small, her mother feeding her with fluid or semifluid food, as she would feed an infant. The medicine which was ordered was not swallowed; and the attempt to treat her with medicine in her stomach was abandoned. The kidneys appeared slightly tender, and at first she had some difficulty in urinating, but not great, and it soon passed away. The temperature of the skin was normal.

I commenced by passing a light galvanic current through my own person and thence from the top of her head to her feet, continuing the application fifteen or twenty minutes, every other day for about a week, which produced a marked change for the better in the expression of the countenance, the eyes, and the muscular contractions. Her articulation improved and she appeared more quiet and improved in every particular.

I still continued the application of galvanism in a weak current through the brain to the extremities for two or three weeks longer, until the cerebral tendencies entirely dissappeared. I also carried galvanic currents through the pelvis from the sacrum to the pubes, so as to rouse to activity the organs in this region. This treatment I continued, making from two to four applications a week, until the last of September, or about six weeks from the time I first saw the patient. During my treatment I gave her no internal medicine.

When I left her, after six weeks of treatment as detailed, she appeared to be entirely well of all her difficulties, ate well, drank well, slept well, with a mind perfectly sane and strong, and with no traces of the chorea. She has remained entirely free from the slightest trace of her former disease up to the present time, seven months, but menstruation has not yet appeared. She is strong and capable of the usual mental and physical efforts of girls of her age.

SINGULAR AFFECTION OF THE EYE.

BY PROF. J. EMERSON KENT.

J. D——, aged thirty, consulted me under the following circumstances. For upward of four months, upon the approach of evening, he had been subjected to a lancinating pain in the eyes, traversing the eye-brows; which gradually increased with the increasing darkness, and during the night became agonizingly severe. The pain was attended with confused vision, luminous scintillation, illuminated wreaths or clouds, incessant nictation, general tremors, and much mental excitement. These phenomena were never realized in the day-time, and soon disappeared upon lighting the gas in his room.

It is upon this latter fact that the anomalous nature of the case rests; for darkness usually alleviates almost every painful affection of this organ; while in the case before us, the morbid phenomena were only present during the absence of light, disappearing in a very short time after the restoration thereof. Satisfied of the nervous character of the case, and at once recognizing its paroxysmal and periodic repetitions, he was put under the following treatment:

℞. Morphia Sulph. grs. vj.
Ipecacuanha pulv. grs. xii. M.

and divide in xii papers; one of which was ordered an hour before, and a second at midnight if the pain so indicated.

Throughout the day, commencing early in the morning, he was ordered to take one of the following powders every two hours, discontinuing them about an hour before sunset.

℞. Quinia Sulph. grs. xxiv.
Leptandrine.
Sanguinarina, āā grs. ij. M.

and divide in to xxiv papers.

A single week sufficed for the complete arrest of the super-sensorial determination, and the cure of the case,—nor has the patient realized the slightest return thereof, up to the present time, a period of nearly six months.

During the four months preceding his visit to my office, he had been several times cupped, leeched, blistered, and otherwise depleted, without receiving even temporary relief. The case was viewed as an inflammatory affection, hence the so-called antiphlogistic treatment. That it was not inflammatory in the scholastic sense of that term, is proven by the readiness with which it yielded to the treatment described; indeed, within forty-eight hours, the paroxysmal character of the case had disappeared.

When will practitioners, by a recognition of the law of the periodism of all vital movement, normal and abnormal,—"a fact," said the late Prof. Mitchell, "as well established as any other in medicine," save their patients from weeks and months of suffering, instead of perpetuating the same by their unphilosophical and unscientific treatment?

FERRI FERROCYANURETUM.

BY T. C. MILLER, M. D.

In administering Prussiate of Iron, we make the impression of the chalybeate on the system, but modified in its action by the acid with which the metal is combined.

In order to determine the exact modification in the action of iron by its combination with hydrocyanic acid, in this salt, I have tried it on animals without the slightest narcotic impression being manifested, as was also observed by Coullon; but other eminent experimenters have obtained different results, and their testimony is not to be lightly set aside.

Physicians have been positive that it acts as a sedative on the nerves, particularly the ganglio-spinal ones, and on the muscles as an astringent, rendering it particularly applicable to those cases where there is considerable debility of the organs within the abdominal cavity, while at the same time there is an irritability and excitability of the splancnic and spinal nerves.

I am fully convinced that it is a mild, and, notwithstanding its comparative insolubility, one of the best preparations of iron in use. It does not in the least derange the organs of digestion, but may with advantage be administered in many cases of peculiar excitability of the stomach. The skilful and able Prof. Sachs speaks quite strongly of it, as in this regard preferable to all other preparations of iron. My own experience during twenty-seven years of practical use of it, confirms me in the truth of these ideas.

In obstinate intermittents, it has at times appeared more effectual than cinchonia or its alkaloids, as it appears to supply a want, in the blood, produced by the continued presence of the miasm, which quinia cannot supply.

The honor of introducing it into the treatment of these diseases belongs to American physicians, as Zollekoffer, Eberle, Hossack, Jackson, Craighead, and particularly, the late Prof. I. G. Jones. The German physicians, as Wutzer, E. W. Sachs, von Stoseh, Nevermann, Hasse, Richter, Dreger, and others, adopted it into their practice in the treatment of intermittents, combined with quinia, rhubarb, or chinoidine, and with quite satisfactory results.

It is peculiarly applicable to those cases where the nervous excitability is quite a prominent symptom, and the patient feels unusually debiltaited and weak; and especially when the fever has been quite prolonged and obstinate of cure under the ordinary remedies. Also, in those affections which appear as sequels to intermittents, and particularly in enlargements of the liver and spleen.

It is valuable in remittent fever, as taught by Zollekoffer, and in typhoid fever, as established by Prof. Jones, one of the strongest advocates of its use. In remittents of infants, my own experience has led me to think it very valuable, particularly after the irritability of the stomach has subsided. Or, it may be given at first, if combined or alternated with sub-nitrate of bismuth.

In nervous gastritis, and in various forms nervous derangement of the stomach, as cardialgia, nausea, and flatulency; and in derangements of the upper portions of the intestines, as boborygma, and diarrhœa, it has been found of value. In dysentery, when the inflammation has subsided, and in the atonic condition of the intestines which sometimes follows dysentery, Sachs has found it of value; and Gergéres placed considerable reliance upon it in chronic forms of diarrhœa and dysentery.

In epilepsy, it has been used by a large number of physicians. In chorea, and in facial neuralgia it has been found useful. As long ago as in 1829, Dupuy, a French author, advised its use in facial neuralgia, and since then many have given it a trial.

In various forms of irritable ulcers, ill conditioned, foul, painful, fungous, or malignant, as well as ulcerations in the intestinal canal following typhoid, or enteric fever, I have found it probably the best remedy we have. Bleufus praises it quite highly both as a general and a local remedy in old syphilitic cases, and particularly where there is a mercurial cachexy complicating the disease. Von Stock applied it to all forms of ulcers, with great satisfaction. In chronic inflammations of the eyelids, in epidemic contagious inflammations of the eyelids and other forms of ophthalmia, its local and general use has been found beneficial.

In poisoning with the salts of copper, and particularly with the subacetate, or verdegris, and the sulphate, or blue vitirol, it is a sure and safe antidote.

For a somewhat full and complete explanation of the value of this preparation, considered simply as an *iron*, I would refer to Prof. Cleaveland's article in the College Journal for January, 1857, but in regard to the special value of this preparation of iron, the article in Dunglison's New Remedies, is the best resumé with which I am acquainted.

The dose is from one, two, or three, grains, to perhaps as high as ten grains,repeated three or four times a day.

SYPHILITIC NODES.

BY A. B. JACKSON, M. D.

After the poison of syphilis has been in the body for months or years, pervading one structure after another, the periosteum—the immediate covering of the bones—takes on active inflammatory action. This is followed sooner or later by exfoliation of the bone itself.

The symptoms or manifestations which precede venereal in the bones, are so varying that I will not attempt to rehearse them. An individual takes syphilis in the primary or constitutional form, and suffers eventually with syphilitic throat and eruptions, but these phenomena are made to disappear by medication. In time a distressing pain is felt in the tibia, the cranium, the ulna, or some other subcutaneous bone. It is generally called neuralgic or rheumatic, and treated accordingly. No satisfactory relief follows, and the patient wishes the night would never come, so aggravated is his suffering on account of nocturnal influences. The sleep-inviting couch is sought, yet the horizontal position is unfavorable to relief from such pains. If narcotics be taken to benumb the feverish nerves, their influence is soon lost, leaving the system in a maddened state for increased as well as repeated doses. The appetite fails, the body shrinks, and life wanes gradually with paroxysmal hectic. Such is the end of not a few of those who have for years carried syphilis.

A patient complains of harassing pains in his bones;—he denies ever having had syphilis,—what is to be thought of them? Are they venereal, or is the difficulty rheumatic? The difference between the pains of the two diseases is so ill-defined that they can scarcely be determined. Rheumatic pains oftenest attack the deep seated bones, and the structures near the joints. Syphilitic periosteal pains generally fix upon the shafts of such long bones as are thinnest covered. In the latter disease the tibiæ most frequently are the seat of periodic and constant pains. The patient in the evening experiences a disposition to rub the shin; he at length finds a slight elevation which feels as hard as bone. This lump gradually becomes more conspicuous, by growing larger and more prominent. If it be pressed upon carelessly, it seems as though a perfect *node* had already formed. Such is not the case however, for the tumor contains only a jelly-like substance which resembles the reparative lymph that is used in the union of fractured injuries.

In the disease under consideration, the virus irritates the bone just beneath its covering, calling forth an effusion which serves to separate the two structures; and the periosteum being dense and quite inelastic, a tumor of strong hardness results. This, if it be pressed upon with force at one point, will be found to yield gradually, leaving a pit or indentation which lasts some time. If the tumor were a perfect node, being altogether osseous, no indentation could be made in it; but as it is, the lymph is forced away in every direction from beneath the finger, its impression being left in the lump, as is the digital print in œdematous swellings.

The incipient stages of a node being passed in the manner just described, bony matter is at length deposited, making a real exostosis, or osseous tumor. The process of bony deposit may go on for several months, or until the space occupied by the lymph is filled. It may then subside, yet it is apt to remain a *node* for life, neither pain nor discoloration continuing. This, for those who do not wear tight pants, is no serious matter, if the disease has spent itself. But, unfortunately for the victims to venereal, the penalty is not paid. Another tumor appears above or below the original, which may prove too distressingly painful for a mortal to endure. Or the lymph effused may degenerate into pus, the part becoming inflamed. What a hideous disease is this. The serpent has left its trail even upon the bones. "All within and without is corrupt." An offended, outraged nature is to be appeased, and the transgressor must expiate the crime, until he shall sincerely believe that his "way is hard."

Not only are the bones subject to venereal enlargement, but the tendons take on a nodose character. The tendonous difficulty begins in irritation, which is followed by all the symptoms of inflammation. Thickening attacks the sheaths through which the tendons play at the wrist and ankle, and lastly the tendons themselves undergo enlargement. The entire process is attended by severe pains, which most often harrass the patient at night, and in damp weather. These tendonous enlargements rarely suppurate, but having become as large as filberts, continue in this condition. The pain may eventually subside, yet occasional attacks constitute the history of most such cases.

Let syphilis be as bad as it is ever represented, in its true unmixed character it is not a hundredth part so intolerable, and obstinate to treat, as when complicated with mercury. This mineral creates another disease (*allos pathos*) which is like the first, (*similia similibus*) and the two become more intimately joined than Chang and Eng. So loathsome and unyielding is a mercurio-venereal disease that it requires no small share of heroism to engage with it. The twelve labors of Hercules become insignificant in comparison. Either malady is a host in itself, yet when the two are combined a formidable enemy takes the field.

Treatment. To treat syphilitic nodes successfully, requires more than ordinary skill and patience. The sufferer usually becomes very impatient, and accuses the doctor for not administering relief. Instead of giving anodynes to lull the pain, efforts must be made to remove the cause of the agonizing sensations. If all the remedies brought forward to arrest the disease when the bones become affected with incipient nodes, the iodide of potassium is the best. Other agents will accomplish something, yet they are impotent in comparison with this remedy. Mineral and vegetable acids are better than no medicines; the syrups of stillingia, corydalis, sarsaparilla, and a dozen other ingenious compounds deserve notice; acid and alkaline baths, with and without electricity, are *by those pecuniarily interested in the popularity of the plan*, reputed to be effectual; and the Thomsonians extol vapor baths, and emetics.

When a venereal tumor of the periosteum and bone is presented for treatment, and I find by pressing upon it that there is an accumulation of lymph or purulent fluid which is producing a large share of the pain, I incise the parts freely. The incision gives the pent up fluids an opportunity to escape. The wound should not be allowed to heal by the "first intention," but should be kept open to facilitate discharges, and to secure union by granulation. If this be done the cicatrix will seem to adhere closely to the bony matter deposited, and a cure results. I have with the scalpel, many times laid open periostoses of the tibia and cranium, and never saw the slightest evidence that it was not the best practice. I have also pustulated such lumps with the irritating plaster and croton oil, but I never saw much benefit to arise from the treatment. Anodynes locally applied, affect little, the great strength and inelasticity of the periosteum not allowing the fluids sufficient room as they accumulate.

The iodide of potassium should be given in larger doses than it is ordinarily prescribed, and repeated three or four times a day. This medicine will often enable a patient to sleep, who has been kept awake with pain for several nights. If there be mercury in the body, in combination with the syphilis, the iodide of potassium is not the less indicated; but it seems in an eminent degree to have the power of neutralizing both poisons. Many of the mineral waters of this country possess excellent qualities for the relief of venereal bones. Then, the diversion of mind obtained by visiting the places where these waters are found, has much to do toward restoring the patient's general health.

If one node after another arise the incising process should be applied to them as fast as they appear, and the internal medicines should be persevered in for months. Enlarged tendons may be laid open, though they better be let alone until thorough systemic medication has been resorted to. By anti-venereal treatment they often subside, or fail to be troublesome.

When the bones become carious, or the exfoliations are considerable, the gouge forceps, or the trephine, mallet and chisel, are to be used in the removal of irritating osseous material. When a node appears on the forehead I am disposed to blister over it, or apply the irritating plaster of the American Dispensatory, rather than cut down upon it. When incised a depressed cicatrix is liable to result, which is more unsightly than that which follows in the natural progress of the disease. Besides, the plaster affords about as much relief from pain, as an incision.

The irritating plaster applied to a node upon the tibia or ulna, will often mitigate the pain; and when a patient refuses to have the part incised, it should constitute a part of the treatment. Pursue any course, the management of nodes is often very discouraging. The relief afforded is apt to prove only temporary, the patient returning again in a few months with the same symptoms. But, let him come. I am satisfied the treatment I have pointed out is the best that can be followed. I have given mercury for the cure of venereal nodes, but have never found that mineral so potent in alleviating the symptoms, as the iodide of potassium. In a few instances I thought the bichloride of mercury did some good, but am not satisfied that it was better than muriatic or sulphuric acid.

There are a few paragraphs in "*Stanley's Treatise on the Bones*," concerning the use of iodide of potassium, which I will quote to substantiate, except in regard to dose, the views I have already presented. "There is" page 44, "an internal remedy, which never fails to assist in the removal of inflammation from bone. This is iodide of potassium. There have been differences of opinion respecting the most effective dose of this remedy. My experience is in favor of its administration in small doses; for I have not observed, that, when given in large doses, it has more rapidly, or with more certainty, cured the disease. The dose which I ordinarily direct is either two or three grains, three times a day, in camphor mixture, or in bitter vegetable infusion, and in conjunction with sarsaparilla, when, with the disease in the bone, the vital powers are at the same time feeble and depressed.

"It is probably true, that iodide of potassium has the most distinct and best marked influence upon the inflammation of membranous structures; and, occasionally, that its remedial effects will be greatest when the seat of inflammation is the periosteum or medullary membrane, rather than the osseous tissue. But the inflammatory action, whatever was its original seat, soon spreads through the entire bone; therefore iodide of potassium is the remedy for inflammation in bone, under all the circumstances of its occurrence.

"My experience of the use of iodide of potassium in the syphilitic affections of bone, agrees with the records on this subject by Martin Hassing, of Copenhagen, who states, that, 'in no other symptom of syphilis is the iodide so efficacious, and its effects so certain, as in those of pains in the osseous system, whether they occur by night or day, or have troubled the patient for years, or only for a few days;' and he subjoins a statistical account of seventy-three cases of pains of the bones treated by iodide of potassium, in sixty-five of which the pains wholly disappeared, while in three they were diminished, and in five the iodide was given without effect. And here it is but justice to the memory of Dr. Williams, physician to St. Thomas's Hospital, to acknowledge the great service he rendered to medicine, in having been the first to notice the influence of iodide of potassium as a remedy in secondary syphilis."

On the 275th page of the work already quoted from, is the following record: "For the less acute inflammation of periosteum, iodide of potassium is to be regarded as the specific remedy; for it rarely fails to stop the progress of the disease, and, in much the largest proportion of cases, completely cures it. This statement of the remedial agency of iodide of potassium is to be taken in its most comprehensive sense. Whether it be the inflammation of periosteum adjacent to an exfoliating bone, or investing an enlarged bone, or that which is the consequence of scrofula, syphilis, or rheumatism, there has not appeared to me to be any difference in respect to the influence of this remedy upon the disease." In conclusion I may add, that I have met cases that would not yield until I have given the remedy in from eight to twelve grain doses, four times a day.

AFFECTIONS OF THE LACHRYMAL APPARATUS.

BY PROF. A. J. HOWE.

The lachrymal apparatus, being somewhat complicated in structure, is liable to a variety of difficulties. There may be an excess or a deficiency of the lachrymal secretion, the derangement depending upon a multiplicity of causes; or the canals which conduct the fluid from the eye to the nose, may become obstructed. To readily comprehend the several affections in question, requires a review of the anatomy of the lachrymal apparatus.

An excess of the lachrymal secretion (*epiphora*), usually depends upon irritation of the parts in proximity with the eye. Mental emotions, especially joy and grief, call forth from the lachrymal gland more fluid than can be conveyed away by its natural channels.

As a result of disease, profuse lachrymation is quite common. It may arise from irritation of the conjunctiva, as when a mote has fastened upon that membrane; the cilia, from some irregularity in their growth (*trichiasis*), may jag the cornea, or the delicate covering of the anterior portion of the eye-ball; or common conjunctivitis, or catarrhal, scrophulous, and purulent ophthalmia, may by sympathy of continuity, or anatomical relationship produce an overaction of the lachrymal gland. Teething, worms, disorder of the stomach and intestines, as well as general debility and the consequent irritability of the nervous system, often excite undue lachrymation.

The treatment for excessive secretion on the part of the lachrymal gland, must be governed, as may be inferred from the detail of causes, by the conditions on which the disorder depends. When the difficulty is entirely local, topical applications alone may be sufficient; but general treatment is demanded to overcome an indirect or constitutional cause. A collyrium would effect little, when a vermifuge was needed; and incision of the gums would be equally useless in a case of "wild hairs," or irritation produced by entropion. Sometimes an excess of the lachrymal secretion will exist after the primary cause is removed, a *habit* or *tendency* having been produced by long continued overaction. The state may be partly or completely overcome by applying aconitina to the integument covering the lachrymal gland. A convenient form in which to use the remedy, is the following:

℞. Glycerine, f℥iv.
Aconitina, grs. ij. M.

This may be applied with a camel hair pencil, or a small swab. The glycerine is a solvent of the narcotic, and prevents its ready evaporation.

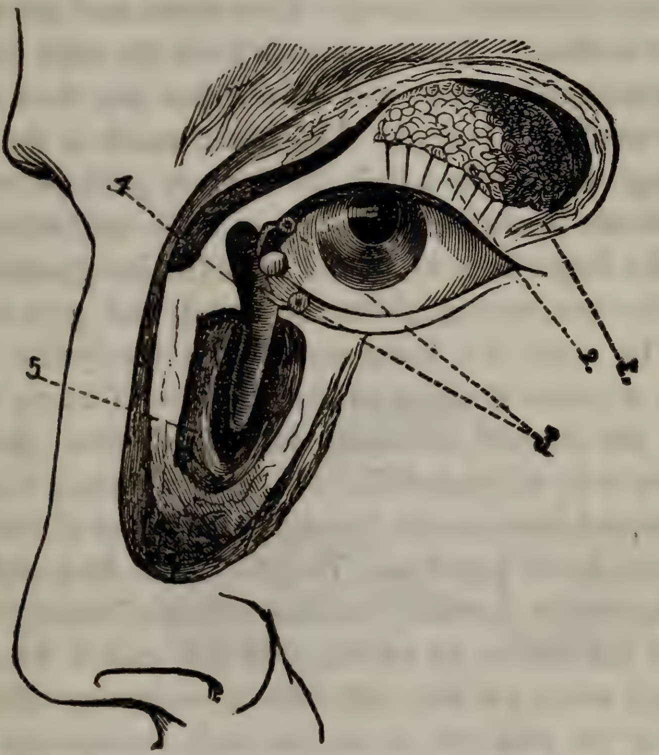
There is another affection of the lachrymal gland which is the reverse of the first mentioned. I refer to a dryness of the conjunctiva, which seems to arise in part from a lack of the lachrymal secretion. It is called xeroma, or xerophthalmia, terms which denote a deficiency of palpebral lubrication. This condition is thought to depend as much upon a want of action in the Meibomian follicles, as an arrest of the lachrymal secretion. Elderly persons are most subject to it, and those who have a deficiency of nervous energy. Amaurotic patients, especially when they are undergoing the earlier forms of the disease, usually complain of a lack of moisture in the eye. The sensation in part arises from the enlargement of the vessels of the conjunctival and sclerotic coats.

The treatment should be directed to the cause, if that can be ascertained. Strychnia ointment applied to the edges of the lids, and over the region of the lachrymal gland may be sufficient to excite to action all the secreting apparatus of the eye. Bathing the eyes with milk and water and mucilages, affords some relief; and galvano-electric currents are beneficial when the gland is inactive. In bad cases the cornea from a flaky, dry state, fails to transmit light perfectly. This condition is rather unfavorable, complete relief being rarely obtained. To appreciate all the discouraging features of such a case, the practitioner needs to have one for treatment. The distorted lids and accompanying trichiasis, the closed puncta, diseased carunculæ, and adhering palpebræ, will be enough to convince any one that the difficulty is no trifling affair.

The lachrymal gland is rarely affected with scirrhus, or simple hardening and hypertrophy. I have met such a state but twice; in both of which instances I removed the gland. Not that the condition of the organ seemed threatening, but the patients had imbibed the idea that they were to die of cancer; and must, therefore, have the diseased mass removed. The glands appeared to be affected with simple induration, a condition which excited some uneasy sensations, and occasional lancinating pain. Although the enlargement was considerable, the tumors being twice and a half the natural size, there was no positive evidence that the disease was then malignant, or ever would be.

It may be worthy of remark, that the eyes from whose orbits these glands were removed, never seemed to suffer for want of lubrication. Not that there was so much moisture in the eye as usual, but the Meibomian secretion, and that of the conjunctiva and caruncular follicles, seemed to supply all the lubrication that was necessary. What moisture was furnished had greater consistency than usual, and therefore was not so subject to evaporation.

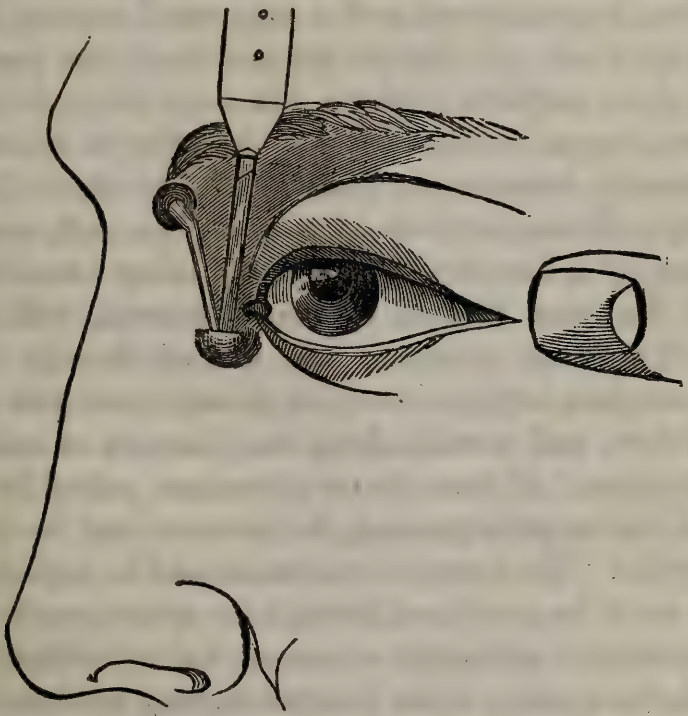
A watery eye from an accumulation of tears between the lids, is an affection of frequent occurrence, and generally depends upon a defect in the apparatus which is designed to conduct away any redundancy of fluid. The secretory functions are normal, but the *excretory* are deranged. By reference to the anatomical diagram in this article, it will be seen at a glance that the puncta lachrymalia, the lachrymal canals (canaliculi), or the nasal duct may be the seat of the defect. The consequence is, let the obstruction be where it may, that there will be a troublesome distillation of tears over the lower lid (stillicidium lachrymarum), the discharge keeping up more or less irritation of the cheek, the eye being constantly brim-full of tears. The presence, too, of an abnormal quantity of the lachrymal fluid upon the conjunctiva, produces considerable vascular excitement in the organ. These symptoms are aggravated by using the eye in viewing minute objects, and by exposure to cold winds.



This diagram represents the lachrymal apparatus, the tissues covering it being dissected away. No. 1, points to the lachrymal gland; 2, the ducts which convey the secretion to the conjunctiva; 3, the puncta, or mouths of the little canals, (canalculi,) which carry the tears into the lachrymal sac; 4, the ductus ad nasum, which empties into the nasal cavity; 5, the bone cut away to exhibit the course of the nasal duct.—(From Nature.)

Not unfrequently the puncta are displaced by distortion of the lids, or contracted from inflammation or injury, or closed altogether. In case the puncta are displaced, they must be restored to position by an operation upon the lids; if they be contracted let them be dilated with a conical probe, such as a common pin with the point rounded a little; and when there are no puncta, the orifices having been closed by inflammation arising from some cause, a cataract needle may be used to make artificial ones. The openings are to be made as near as possible to the original sites. These are to be kept open by passing a fine probe every day until all danger of their closure is passed. The lachrymal canals rarely become obstructed, though concretions and other foreign bodies have lodged in them. These channels from the solid condition of their walls, are constantly open; and were it not for their angular course, they might easily be probed. The lower canal is the largest, yet the upper is large enough to admit the delicate gold, silver, and platinum probes which are made for this purpose. To facilitate the entrance of the probe, the finger is to be placed upon the integument near the outer canthus of the eye, to straighten the canal, and give steadiness to the punctum. To enter the lower canaliculus the probe is first directed downwards, a course it takes to the distance of a line or more, then it changes to the inward direction, until it reaches the lachrymal sac. The direction to be taken to follow the upper channel, is at first upwards, then inwards and downwards, the communication of the canaliculi with the sac being near together. But the most frequent disease of the lachrymal apparatus is an ulcerated condition of the upper and enlarged extremity of the ductus ad nasum, which is called the lachrymal *sac*. The technical term for the difficulty is *dacryocystitis*, meaning inflammation of the tear-cyst or sac, but such refinements of language do little towards enlightening us upon the real pathological state of a case under investigation. For, if we do comprehend the true signification of the term, it may mislead; and if we do not, then it confuses. So far as I have been able to understand those cases of lachrymal overflow, with inflammatory action between the inner canthus and the nose, the lachrymal conduits being particularly involved, I have been led to regard them partly as an ulcerated condition of the sac, but principally as a strictured state of the nasal duct. The eye from conjunctivitis, or other affection, is left inflamed at the inner canthus; considerable tumefaction of the integument just inside of the caruncula is observed, which is severely painful; pressure upon the tumor causes a reflux of the lachrymal fluid and pus through the canaliculi and puncta, diminishing the distension and the pain. Such is a brief history of the phenomena usually presented in patients suffering with stillicidium lachrymarum. And, if the disease be not overcome, the walls of the sac become so thin by ulceration, that a rupture of them takes place, establishing a preternatural opening, which is denominated *fistula lachrymalis*. To cure such difficulties has engaged the attention of surgeons of every age. It must be admitted too, that no plan has proved entirely satisfactory.

The commonest operation for the cure not only of fistula lachrymalis but a narrowed, strictured condition of the nasal duct, has of late years been the overcoming of the obstruction by means of a narrow knife or slender bistoury, and the insertion of a style through the incision and along the nasal duct. The operation is not a very important one, yet a familiarity with the anatomy of the parts is requisite in order to perform it with facility. If the patient be nervous, or afraid of pain, anæsthesia may be produced ; then the surgeon is to feel for the depression just within the orbit at the inner extremity of the orbital border, at a point just below the tendo palpebrarum, as represented in the diagram. An assistant may make the tissues of the lids tense by placing his finger upon the integument of the temple, and pressing outwards. The point of the knife is to be placed upon the skin at the place designated, and carried through the soft structures to the cavity of the sac, or commencement of the duct which occupies the bony canal leading to the nose. For those needing a caution in the matter, it may be re-



This diagram represents the introduction of a style into the ductus ad nasum. The style is made to enter for some distance before the knife is entirely removed,—a precaution which facilitates the process of insertion. The finger seen beyond the outer canthus, serves to straighten the margins of the lids, and render prominent the palpebral tendon.—(Original.)

marked that the bones surrounding the nasal duct are very easily perforated in case the point of the knife is not directed to the proper place. If the opening in the bones be not hit in the first attempt, the instrument is to be raised a little and moved each way until the natural channel be found. The structure is then to be divided by carrying the bistoury along the canal for a third of an inch or until the resistance is overcome. While the knife is being withdrawn the style—which is made of silver or gold, and shaped like the one represented in the diagram—is to be inserted, and carried in its entire length, its head—covered with black sealing wax, to obviate its being noticed—resting upon the common integument. The style may be worn several months if it do not create much irritation. Around this the tears find their way to the nostril, the stillicidium being cured. In some instances, however, the style excites so much irritation that it must be removed often, to avoid ulceration around it. During the time it is out, the duct may be kept open by the daily passage of a bougie. Anel's syringe, an instrument with a very small nozzle, is often used to wash out the track. If this be not possessed, the probe or bougie will answer every purpose. After a few days the style may be reinserted, where it is to remain until it be judicious to remove it. Much time is necessarily consumed in this way, during which the patient improves slowly. To be sure that all is going on well, a delicate probe—for this purpose a fine needle, the eye-end being forced into a wooden pencil, and the other blunted and made smooth, will do—is to be entered at the lower punctum, and carried through the canaliculus to the sac, then turned downwards to correspond with the direction of the nasal duct, and carried along that passage to make sure there are no obstructions. If there be no advantage gained by repeated explorations of this angular passage, the process may be dropped, as it may do mischief. The ductus ad nasum should be kept open with bougies, which are to be introduced through the opening made for the style. After the stricture is apparently overcome, and all inflammation of the sac subsided, the opening in the integument may be closed by applying caustic to its borders.

Fistula Lachrymalis. This arises from inflammation, or injury of the lachrymal duct, and not unfrequently an abscess of the lachrymal sac, which, breaking through the integument, causes a fistulous opening. This is not disposed to heal while the obstacle to the passage of tears remains in the nasal duct. While the tears are discharged freely through the fistulous opening, and consequently do not collect in the sac, the inflammatory action in the lachrymal passages may subside, yet the face over which the tears flow, is in time excoriated.

To close the fistula permanently, requires about the same kind of treatment as that just recommended for ulceration of the lachrymal sac and stricture of the nasal duct. The use of a style is to be employed for a few days or weeks, and then the cure is to be finished by using probes and bougies. In some instances it may only be necessary to use probes in the beginning, yet in a majority of cases the curative process may be hastened by cutting through the integument and the stricture, and distending the passage afterwards with such dilators as are adapted to the peculiarities of the case.

Not unfrequently there is an unusual degree of excitement in the conjunctiva in cases of lachrymal obstructions. This must be allayed by using anodyne and antiphlogistic collyria. Weak solutions of borax, zinc, lead, iron, silver, and copper have been known to affect some good. To either of these washes morphia may be added for its sedative qualities. In many cases a solution of salicine—four grains to the ounce of water—has a happy effect, the disease being one of debility. The vegetable tonics and astringents, compounded with anodynes, generally have a more salutary effect than the mineral tonics and astringents.

When the lachrymal sac is inflamed to a degree that threatens abscess, the application of powerful anodynes to the integument at the root of the nose, serves to arrest it. Aconitina mixed with glycerine, constitutes a desirable preparation for this purpose. It is not to be supposed, however, that the inflammation may be entirely subdued until the thickened, indurated state of the nasal duct at the point where it enters the lachrymal bone, is reduced by dilating instruments.

Attempts have been made to dilate the ductus ad nasum by introducing a sound from the nasal cavity upwards through the tear-conduit to the lachrymal sac; but such endeavors have mostly proved futile, as the introduction of sounds in this direction is contrary to the anatomy of the parts. There is a prolongation of this duct into the nasal cavity, which by its valvular folds, is opposed to the entrance of an instrument. Gensoul, of Lyons, has the reputation of being the first to practice this method. For reasons already given this process has been considered impracticable.

Pursue what plan we may, the treatment of difficulties of the lachrymal passages is commonly tedious. The patient must be assured from the beginning that it will require many sittings to effect what is desired, or a feeling of disappointment and dissatisfaction may in time arise. I am convinced that the indiscriminate practice of inserting styles, and ordering them to be worn continuously with the hope of cure, has done much to bring the operation into disrepute. And with reason this might follow, if those who use the style are unaquainted with the pathology of the disease, and the effects produced by the instrument. Some surgeons have condemned the use of the style altogether, having several times been chagrined with its failure. In fact it need not be used at all, if an opening from the integument to the inside of the lachrymal sac be made, the stricture divided, and a bougie be passed daily. The opening in the skin may be kept closed with court plaster, except while the bougie is being used.

INFLAMMATION OF THE UTERUS.

BY N. HASTINGS, M. D.

No year passes but I have one or more cases of *metritis*, or inflammation of the womb, to manage. Treat them I must, for I am called to take charge of the cases; and when thus solicited, what humane, money-loving doctor can refuse?

Although I am somewhat advanced in life, and have a respectable share of this world's goods, I enjoy the practice of medicine. I would not have my younger brethren believe that I am particularly avaricious, or that I despise their efforts in attempting to establish themselves in a lucrative business. I was once in their position, and have not forgotten the feeling I then entertained, which was, that every "old Galen" in the vicinity hated me, and envied me the meagre income of a dozen or two of insolvent patrons. Now let me say to those, necessarily entertaining such views, that sordid as old fogies are, they do not envy you any more than you envy them. Both are rivals, and enter the contest with spirit. Who are likely to succeed? The younger of course, for they outlive their rivals,—and by the time the juniors have well accomplished this, they become seniors, in turn to envy and be envied.

Well, what has this to do with my subject? very little, as my reader has already anticipated. Yet it has, for I am going to assist my young friends, by making known from time to time the way I have treated this, that, and the other disease successfully. Is not this magnanimous in me? I know my junior readers will appreciate my motives.

Inflammation of the uterus, let it come on from whatever cause,—from miscarriage, deranged menstruation, injury, or from some more obscure excitement—is often very difficult to subdue. The organ is located deep in the body; it is nervous and vascular; it is subject to various deranging influences, which have a tendency to prolong its difficulties. It lies between the bladder and rectum, and therefore is subject to every disturbance or morbid action, affecting those organs. They cannot be evacuated without an effort, which must disturb the womb. The uterus is indirectly attached to the perineum, and must necessarily partake of all the movements given to the diaphragm. A cough, then, is sure to harrass this organ, to arouse it when repose is most needed. What a pitiable piece of organization! Nothing which can suffer, suffers so much as this. But it becomes inflamed, and the entire body sympathizes. The pulse is increased, the secretions are deranged, the skin is dry,—in fact a constitutional fever is ushered in. Yet what is the evidence that the uterus is inflamed? Well, there is great tenderness, sensitiveness in the region of the womb, which is called forth by manipulation, or pressure upon the lower part of the abdomen. Sometimes the uterus, when larger than in its normal state, as it usually is when inflamed, can be felt through the abdominal walls; the neck of the womb is exquisitely sensitive to the touch when a vaginal examination is made, especially if the organ be tilted on the finger, as if to ascertain its weight. A lochial or menstrual discharge may have been suddenly and entirely arrested; pain is elicited in attempts to evacuate the bladder and rectum, particularly the latter. There will be pain in the lower part of the back, and, by times, down the limbs. The bowels are generally constipated, and the urine scanty, though it must be often passed. These are among the most prominent symptoms of the disease in question.

Treatment.—Not to be neglected in the management of inflammation of the uterus, is rest, absolute rest, or as near that state as possible. The circulation is to be controlled by the use of veratrum, gelseminum, or aconite. These agents stimulate the glandular system, exert a sedative influence upon the cerebro-spinal nerves, and excite gentle perspiration. The bowels are not to be moved with cathartics; but mild laxatives should be given in small but frequently repeated doses, until a soluble condition of the contents of the intestines is produced, when an evacuation may be secured by the use of moderate sized enemata. To distend the rectum with large injections, excites pain through mechanical pressure. The kidneys may be stimulated by the use of spearmint tea, used as a drink. Decoctions of other diuretic herbs may be used for the same purpose. Buchu, uva ursa, and mother-wort make excellent drinks for females suffering from irritability of the bladder.

Over the abdomen there must be kept a light fomentation of some anodyne herbs. I like stramonium leaves for this purpose, and believe there is nothing better. The fomentation is to be often repeated, and always applied as hot as the patient can well bear it. The heat serves to divert the nervous action from the inflamed internal organ to the surface. There is but one objection to fomentations used in this way, which is, that they stain the linen of the patient and the bed. But in comparison with the advantages to be derived from them, this objection is not weighty. Other anodyne herbs may be used instead of stramonium, yet few are better. In preparing the fomentation, a few ounces of leaves may be placed in a muslin bag, upon which boiling water may be poured while it lies in a basin. It is then to be raised out of the water, cooled a little, and applied. The effect of the fomentation may be needed for a number of days, inasmuch as the disease does not usually terminate rapidly.

A tepid infusion of lobelia and poppy leaves is to be injected into the vagina three times a day, with an elastic syringe. And it will hasten the cure very much in most cases, if a canula be introduced into the neck of the uterus, and the infusion be thrown through this, into the cavity of the organ. The warm hip-bath has been highly extolled in this disease, yet its effects are uncertain. While relief follows in one case, in another blood seems to be called to the organ, and an aggravation of the symptoms results.

Frequently there is much distress in the back. This may be relieved by applying to it flannels wrung out of warm vinegar and water.

While the patient is recovering, tonic treatment is particularly indicated. The "Syrupus Mitchellæ Compositus," of King's *American Dispensatory*, is not to be neglected. I have also used, to effect a similar purpose, a wine tincture of unicorn-root, wild cherry, and dog-wood (cornus Florida) barks. An ounce of each of these may be put into a pint of Port or Catawba wine, and after standing a week, the preparation is fit for use. A tablespoonful of the tincture, in sweetened water, is a dose, which may be repeated four times a day.

Under such treatment, the inflammation will gradually subside, and the uterus diminish in size. But it must be borne in mind that a *relapse* in the disease is about sure to follow any excess. Not only must active exercise be prohibited, but everything which shall excite the genital organs.

"Last, but not least," junior practitioners, be sure, before resorting to any kind of treatment, to ascertain whether the uterus be in its normal position. Any considerable deviation of the organ, is likely to be followed by an attack of inflammation.

PARASITES IN THE INTESTINAL CANAL.

BY J. ANDREWS, M. D.

January 1st 1857, I was called to see a child of Mrs. L., which was laboring under a paroxysm peculiar to children affected with worms. I endeavored to ascertain the history of the case, but the agitation of the mother was so great that I was unable to obtain any satisfactory information. I mixed in sugar and water a quantity of tincture of lobelia and ipecacuanha, and attempted to induce the patient, a girl of ten years, to swallow some of it. This I was unable to do, but succeeded in administering an injection of the same mixture. After waiting a few minutes I repeated the operation, throwing into the bowel, each time, two teaspoonfuls of lobelia and ipecac. tincture. The rectum was evacuated, but the spasmodic paroxysm did not abate. I next tried the vapor of chloroform to the nostrils, which very soon restored consciousness, and alleviated all the alarming symptoms. I noticed that the patient's breath was very fœtid. The mother said it had been so for several weeks. I learned also that the child craved food every few hours, would start up, as if frightened, in her sleep; and was subject to daily periodic fever.

The next day I visited the patient, and prescribed a combination of remedies very nearly like the *Entozoic Powder*, minus the aloes, mentioned in "King's Family Physician." In a few days large numbers of ascarides were carried off at stool. The appetite soon became regular, the breath sweet, and every symptom of health established. From this time to the present, the girl has had no spasm, but every two or three months for nearly a year, the breath would get fœtid, the appetite morbid, and every indication of an attack of worms present itself. As soon as these symptoms appeared, the mother would administer the anthelmintic just announced, and the patient would discharge parasites, and rapidly recover. For the last four or five months she has been continually well, no evidence of worms remaining.

Case II. September last a boy eight years of age was brought to me for an opinion concerning the cause of his puny condition, he having been unable to walk for three years. His legs were atrophied; his abdomen too large; eyes watery; breath fœtid; appetite morbid; lips very red; and other verminous symptoms were present. I prescribed at several different times, preparations of turpentine, aloes, senna and jalap, and worm seed, but no worms were expelled, at least none were observed, and the child did not improve. I finally resorted to the *En-*

tozoic Powder, and great quanties of worms and the colloid substance which they inhabit, were discharged. The patient then improved rapidly in every respect, and is now to every appearance perfectly well.

Case III. Within two months I was summoned to see a girl fourteen years of age, who was no larger than a child should be at nine or ten. She had been sickly for several years, but none of several physicians who had seen her, had regarded her disease as one depending upon worms. When I was called, she could not pass water voluntarily. Her lips were unnaturally red; she kept her fingers to her nose, as if that organ was greatly irritated; her breath was disagreeable; and her eyes were glassy. I ordered the catheter to be used often enough to relieve any unusual disturbance of the bladder. In this case too, I prescribed the "Entozoic powder" without the aloes, and the patient passed worms, and recovered the control of the bladder, and good health.

POISONING BY NITRIC ACID VAPOR.

BY ISAAC SMITH, M. D.

In September last, I was called in the night to Mr. G. C——, aged 25, a dyer by trade. In the attic of his factory he kept a jar of nitric acid, containing when full, about five gallons. He had on the previous day taken some from it, and on replacing it not very carefully, it burst and discharged its contents on the floor. Fearing it would burn the building, he worked in the room about twenty minutes, endeavoring to absorb and remove what he could.

During this time, he inhaled the fumes, which painted rainbows before his eyes, going occasionally to the window to breathe. He retired as usual, but awoke in the night, with distress at the stomach and lungs, and great difficulty in breathing. I found him suffering also from burns, caused by contact with the acid. Dry cough; pulse 120.

Treatment.—I at first gave a mixture of wood charcoal, and calcined magnesia followed by an emetic. Inhalation of ammonia was kept up at intervals during twenty-four hours, with the view of its neutralizing effect upon the acid, through the same medium that admitted the poison. An alkaline bath was applied to the surface; and the patient was then kept in a gentle perspiration for three days. The ejections by emesis, as also the cutaneous exhalations, presented distinctly the effluvia of the jar. On the fourth day the bowels were moved by injections, and the pulse fell to forty-five. Stimulants were resorted to, under the influence of which he rallied, and on the eighth day was discharged, cured.

EDITORIAL DEPARTMENT.

BATHS.

In the Editorial of the College Journal for May, we briefly stated the results obtained in a series of experiments, instituted to determine the influence of baths in regard to *absorption*, their influence on the *temperature* of the body, on *respiration*, on the *constitution*. We now propose to resume the subject, and first, will give the results obtained in regard to the *Influence of Baths upon the excretions.* Within a few years past, the study of the changes which the tissues having subserved their uses in the living economy, undergo previous to their being eliminated, has led to a vast increase in the amount of accurate knowledge in the possession of the profession. The microscope has aided the analytical chemist, and by the combined aid of microscopy and chemistry, new modes of examining the urine and the other excretions have been introduced into use, which being adopted by Schotton, Funke, Marcet, and others, have enabled them to determine with great exactitude what is thrown off from the body.

Heretofore, even with the greatest care to avoid error, many of the apparent results obtained were found to be untenable in practice, and even now they must be received with some doubt; but it is desirable to have on record the result of observation, even if it is more than probable that farther research and more accurate knowledge will determine the unsoundness of some of the opinions at present entertained.

Some four years since, Dr. J. Lehmann commenced a series of experiments to determine the influence of baths on the excretions. In 1856 a great number of experiments were made, and were conducted with such caution and care as to inspire no little confidence in the conclusions arrived at. These conclusions may be stated in brief, as follows:—

1. General cold baths temporarily increase the flow of urinary water, and perhaps of the amount of solids held in solution.

2. General warm baths also temporarily increase the amount of urinary water excreted.

3. Baths, either cold or warm, *do not* increase the amount of urine excreted in the twenty-four hours. The amount of temporary increase was often very great, sometimes to four-fold the normal excretion; but the subsequent lessened excretion fully compensated for the temporary increase of flow. The experiments of Nasse, and of Boulet fully confirm the correctness of these conclusions.

Whatever is observed to be the immediate effect of a general bath on the weight of the body, if the bath be not prolonged so as to diminish the health of the bather, no diminution in the weight of the body can be detected at the end of twenty-four hours.

4. General baths lessen the acidity of the urine, but not to a great extent.

5. The intestinal excretions are not affected in quantity in any appreciable degree by the action of general baths.

The influence of saline baths has been made a subject of very careful experimental study by Neubaur, Lehmann, Dr. Genth, and others. The conclusions arrived at by all who have reported the results obtained, and after they had been oftentimes repeated, were:—

1. When a single bath is taken, the urinary water immediately after the bath is increased, but during the remainder of the day the process of excretion appears to be arrested, or very considerably lessened in amount.

2. When the saline bath is warm, the amount of water and solids in the urinary excretion is not increased, but have been observed to be materially lessened in quantity.

3. The solids excreted are always lessened in amount when the bath is both saline and warm.

4. The acidity of the urine does not appear to be affected uniformly in different instances by the warm saline bath.

6. The insensible perspiration is considerably increased by the use of warm saline baths.

As has been shown, *warm* baths do not favor absorption, but do favor cutaneous exhalation; and, while they check urinary excretions, they augment excretions from the skin and the intestines.

Hip-Baths. The effects observed to follow the use of *cold* sitz-baths were found to be so variable, that no definite or reliable general conclusions can be drawn from them. Hip-baths of a moderate temperature did *not* appear to have any effect on the excretions. The results obtained cannot be relied on as absolute, but the *probable* results, (those thus far most commonly observed,) may be stated as follows:—

1. Probably both cold and hot hip-baths increase the flow of urine for a short time after the bath has been taken.

2. Hip-baths of a moderate temperature do not appear to produce any effect upon the quantity of water excreted.

3. The experiments, although quite numerous, do not point to any positive conclusions in regard to the effect of hip-baths upon the amount of solids excreted from the system in solution in the urine.

4. The acidity of the urine does not appear to be uniformily influenced by hip-baths.

5. Without determining the matter fully, the experiments indicate that the amount of excretion from the bowels is probably increased by a hip-bath.

The conclusion may be considered established, that so far as the main matter of disintegration, elimination, or purification, of the system is concerned, hip-baths have but little power, while their influence on the nervous system may be considerable; and as the reproductive organs of the female are influenced by it as well as the nerves, the beneficial influence of hip-baths in one class of disease must be mainly owing to the impression the baths make directly upon the pelvic organs, or upon them through the nerves.

The cold wet sheet. Wudnt has made some interesting and valuable experiments to determine the influences of the application of the cold wet sheet. Two women at Heidelburgh were submitted to the action of the wet sheet for four hours, and with them it was observed:

1. The body lost weight under the application of the wet sheet. Although at first it was cold, it soon became warm, and like a warm bath, increased the cutaneous exhalation, but to a far less extent than was supposed until the results were carefully determined.

2. The urinary secretions at first were considerably increased, but the effect on these excretions for a whole day or longer, was not determined.

3. In some experiments, where the wet sheet was continued for six hours, the effects were found to be less in proportion to the duration of the application than where it was applied for a shorter time.

The influence produced by the wet sheet upon the internal excretions, and upon the nervous system, were not made the subject of special investigation, and therefore nothing definite or reliable is known on those points.

The experiments in regard to the action of various kinds and modification of baths, which have led to the conclusions detailed in the present and former paper, were conducted by very honorable, conscientious and scientific men, and the results obtained by those experiments have been carefully collected; yet these conclusions may not all stand the test of continued trials.

Unless the experiments are carefully made, often repeated, and the calculations of results cautiously conducted, fallacious conclusions are inevitable. And where the results are *guessed* at, as according with impressions *hoped* for, they are entirely unworthy serious consideration. But such was not the case in regard to these researches. Many experiments were made, at various times, and by quite a number of observers; and, although they agreed with remarkable unanimity in many of their conclusions, yet the profession will hesitate for some time, and for farther confirmation, before some of their conclusions will be adopted without doubt or reservation.

CLOSE OF THE SPRING SESSION.

On Wednesday, May 18th, the Spring Session of lectures in the Eclectic College of Medicine, terminated. The closing exercises were of the usual character. The Dean made a report of the Session, during which he took occasion to speak of the unparalelled success of the enterprize, no Medical College ever enjoying such rapid and uninterrupted progress. He alluded to the moral and intellectual acquirements of the class, in language calculated to awaken in its members a determination to sustain the good reputation their friends took pleasure in awarding them.

The number of matriculants for the Spring term amounted to seventy-six. The attendance of most of these had been very constant, showing a disposition on the part of those who engage in the responsible duty of preparing themselves for physicians, to make the best of their time and talents. He referred to the much to be reprehended custom of either joining the class after the session had advanced several weeks, or leaving it as long before the close. A few examples of the kind it was to be regretted, might be cited as occurring during the past term. This species of delinquency was being extinguished by granting "certificates of attendance," which would correctly indicate the number of weeks actually consumed in the lecture room. As these might have a bearing upon claims for graduation, whether offered at this or any other College, it is expected that the certificate system will exert a favorable influence upon those who might be disposed to avoid a very important rule of the Trustees.

The President of the College, (Prof. Sherwood,) before conferring the degrees, occupied a half hour or so, in addressing those who were about to be vested with all the rights, honors, and privileges of physicians. His remarks ran about as follows:

Gentlemen: You have now passed through the requisite curriculum of study and instruction; have sustained a satisfactory examination in the several branches of knowledge which together constitute the science of medicine, and are therefore entitled to enter the ranks, assume the title, and enjoy the benefits and immunities of members of the medical profession. We have met together at this time, in accordance with time honored custom, to formally confer upon you that honorable degree to which you have been elected by the Board of Trustees of the Eclectic College of Medicine, extend to you a fraternal welcome into the ranks of our profession, and then with a hearty "God speed," dismiss you from the arduous duties of Collegiate life, that you may go forth and assume the still more arduous and responsible duties of your adopted profession.

I do not deem it necessary to deliver to you a formal charge in regard to your obligations as Medical men. This College does not exact of its graduates a pledge of adherence to its teaching, nor of devotion to its interests. I will therefore, only mention briefly a few principles which should, as I conceive, be recognized and acted upon by every medical practitioner.

1. It is the duty of the Medical man to be thoroughly informed on every subject, but especially in such matters as pertain to medical science.

2. All that medical men, and especially graduates know, he has obtained at a very cheap rate compared with the expenditure of time, labor and money that has been incurred by others in the development of scientific and experimental truth.

3. Each medical man, therefore, should cherish due respect for the reputation, and gratitude for the labors of all, whether predecessors, or cotemporaries, who have contributed to our common fund of professional knowledge; should exercise a feeling of fraternal charity toward all who have embraced or advocated errors; and should labor to liquidate his own indebtedness to science by detecting and exposing such errors as mar its beauty or impair practical value, and by discovering and making known to the profession additional facts, that may constitute valuable additions to our common stock of truth.

4. The medical practitioner should feel, and strive to sustain, the true dignity of his profession. On entering the profession, new relations and obligations are assumed in reference not only to the medical faculty, but to the community at large, and peculiar responsibilities of such a position in life should be promptly accepted and honorably sustained. But compensating obligations on the part of others equally exist, and it is the medical man's privilege and duty to exact, courteously but persistently, due recognition from his medical cotemporaries, and such remuneration from his patrons as shall be in some measure commensurate with the responsibility he assumes in bestowing on them professional advice or service.

But on entering the profession he has not ceased to be a man, and should feel and fulfil all the moral and social requirements inculcated in the golden rule, "Whatever ye would that men should do unto you do ye even so to them." Fortunately, however, in sustaining professional dignity we have but to conform to this same rule, and we cannot err.

It is no more the part of a dignified medical man to be pedantic, pompous, and selfish, than of a true gentleman to be captious, cruel, or dishonest.

And now, gentlemen, we are about to part, perhaps to meet no more on earth. Our paths through life may lead us far apart, and under the direction of an All-disposing providence our lots may be very diverse; but in bidding you farewell, the Faculty tender you assurances that their best wishes attend you, and that at all times they will be pleased to hear from you and will rejoice at whatever success and professional eminence you may attain; and may the grace of our common Redeemer assist you and us so to prosecute our temporal journey that we shall meet, if not on earth, in that better and higher state where all, and certainly the physician, shall have rest, for there the inhabitants never say, "I am sick."

He then, by authority, conferred the degree of Doctor in Medicine upon the following members of the graduating class:

R. Anton, Ohio,
W. G. Bruce, Mass.
J. Crooks, Ind.
T. B. Campbell, Ohio,
J. H. Chatten, Ohio,
P. H. Clemons, Ohio,
D. F. Crouse, Ill.
J. H. Crabbs, Ohio,
J. A. McDonald, Min.
W. Mc. L. Finley, Ill.
L. M. Greeley, N. Y.
A. Gage, Ohio,
J. K. Hoyt, N. Y.
G. F. Hoffman, Ohio,
A. F. Joseph, Ohio,
F. M. Jasper, Ky.
F. C. Maetke, La.
J. D. Mayer, Ohio,
M. E. Morse, Mass.
S. Nickles, Ohio,
G. A. Thayer, N. Y.
A. H. Trumbo, Ky.
M. B. Witham, Ohio,
C. E. Witham, Ohio.

Honorary Degree voted to,

Dewitt M. Daniels, Ohio,
Hollis Joy, Nova Scotia,
Thomas G. White, S. C.
Ezra Mann, Ohio,
B. Laguire, Mo.
D. A. Ross, Ohio,

BOOK NOTICES.

Sight and Hearing, How Preserved, and How Lost. By J. Henry Clark, M. D. Fifth Thousand; carefully Revised. With an Index. New York: Charles Scribner, 1859. From Robert Clarke & Co., Cincinnati.

Many attempts have been made to enlighten the public in regard to the physical frame, its preservation in health, and methods of cure when diseased. Some of these books have been written by men who combined a desire to instruct the people with a fair knowledge of the subjects on which they wrote; and their writings have ever proved blessings to humanity. Others, with excellent intentions, but with a deficiency of knowledge, have written and published errors which must prove hurtful. There are yet other writings from men whose principle aim was to advance their own interests.

As the public are not capable of judging either the capacity or the motives of those who address them on the subjects connected with physiology, hygiene, and therapeutics, publications do not always become popular in proportion to their intrinsic value.

The writer of the volume under notice is well informed in regard to the organs of sight and hearing; and has compiled a book of considerable value, perhaps the most valuable popular treatise to be obtained in this country.

Health and Disease. A Book for the people. By Dr. W. W. Hall. New York. H. B. Price 1859.

Within a short period of time, many works for the people, in regard to health, have been published. Some have done a deal of good; while others with the best intentions on the part of their authors, have failed of realizing all that has been hoped for them.

In the present work the attempt has been made to impress upon the public the evils which result from *constipation*, and the necessity of proper attention to the condition of the function of defecation. A large share of the work is but a reiteration in different forms, of the statement that,—"Three fourths of all our ailments occur, or are kept in countenance by preventing the daily food which is eaten, from passing out of the body, after its substance has been extracted by the living machinery, etc."

Without examining the carelessness of the language used in this labored effort to teach the people the necessity of "regulating their bowels," we would briefly say,—that we think the author in error; and if his opinions are correct, they could better have been stated in thirty, than they are in the three hundred pages over which they have been diluted.

A Practical Treatise on the Diseases of Childhood. By F. H. Tanner, M. D., etc. Philadelphia; Lindsay and Blackistone, 1859. From Robert Clarke & Co. Booksellers, Cincinnati.

When *Tanner's Manual of Clinical Medicine* was published in this country over three years since, the College Journal commended it to its readers as one of the most valuable works of modern issue. Last year the publishers of the present volume, gave the profession in America, a *Manual of the Practice of Medicine*, by the same author, which was also commended highly by the JOURNAL.

We have now presented to us a practical treatise on the diseases of Children, larger and fuller than the former volumes, and claiming to be a "complete work on the diseases of Infants and Children, with a series of observations upon the hygienic and general management of the young, as may lead to the prevention of much disease which now exists:"—and yet within the size of a duodecimo volume of less than five hundred pages.

In his former works, the author has displayed very unusual powers of condensation and methodical arrangement. In this, also, his writings are well worthy of imitation in those regards, and he has been able to present, in a condensed form, a vast amount of information, usually of a satisfactory character, in a small space. We do not consider it a "complete work," but a good and satisfactory one, quite as complete as some of larger size and more pretentious claims.

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The Convalescent. By N. PARKER WILLIS. New York: Charles Scribner, 1859. Through the Publishing House of Robert Clarke & Co., Cincinnati.

EVERYBODY probably knows that N. P. Willis the poet and writer, was sick nearly unto death; and now is well again. The articles written by him containing a charming vein of egotism and published in the Home Journal, created quite an interest in the invalid, and the methods pursued which have eventuated in his present convalescent state. This personal interest led to a very large correspondence of inquiry, particularly from invalids, to answer which this volume is intended.

One secret not communicated by his attendant physicians, but which he divulges to his readers, Mr. Willis thinks has enabled him to recover from a lung disease which seemed beyond hope or the probability of cure; and that secret we again divulge to the readers of the COLLEGE JOURNAL. "It is, that the patient, after paying reasonable attention to the symptoms and treatment of his disease, should *ignore and out-happy it.*"

Every physician well knows the very great value of the advice here given, and would gladly have his patients adopt it; but cannot prescribe content or inattention to the physical ills with any assurance of having his prescription followed out. Perhaps, if physicians would prescribe

Mr. Willis' book, to be read in proper quantities and at proper intervals, that prescription would be attended with benefit. The healthy as well as the sick should read it.

Proceedings of The American Association for the Advancement of Science. Twelfth Meeting, held at Baltimore, May, 1858.

THERE seems to be a fatality connected with the publication of the Proceedings of Societies and Associations; for, in spite of the most arduous and persevering efforts of the Publishing Committee, the final appearance of the proceedings are very frequently delayed. The delay in the publication of the present volume is in accordance with the general fact.

To the Medical practitioner this Association and its Transactions are not usually of special interest; but to the Scientist (and all practitioners of medicine *should* be cultivators of Science) the annual volume issued by the association always presents matters of interest and value.

In the department of Chemistry there are observations of some interest to the physician. The papers of Prof. Henry Wurtz, contain matters of more than ordinary interest, and will repay careful study.

We are grieved to observe a growing suspicion among the Societies, that this Association is become controlled by a small clique for its own purposes, rather than for the advancement of Science; and whether this suspicion is well founded or not, it must tend materially to circumscribe its influence and usefulness.

Report of the Commissioners of Patents for the year 1857. Agriculture.

YEAR by year the conductors of Agricultural Periodicals have protested against the course pursued by those having the control of that department of the Patent Office, which, for no obvious reason, manages the *agricultural* affairs of the nation. We leave this matter entirely to those who are more directly interested in it; but must admit that to us as Medical Journalists and even as Scientists, there is little of interest in the volume before us. We accept it, always hoping its successor will be an improvement on the present.

Stray leaves from the Book of Nature. By M. Schele de Vere; of the University of Virginia. New York: A. O. Moore, 1858.

THIS work, as its title imports, is made up of papers relating to the products of the earth, and the universe, written in a truthful, natural, but most fascinating manner, and should be read very extensively by all lovers of the beautiful and useful:—all truly capable of appreciating the handiwork of God in nature.

The title of the Papers in this book, are: "Only a Pebble," "Nature in Motion." "The Ocean and its Life," "A Chat about Plants," "Younger years of a Plant," "Later years of a Plant," "Plant-Mummies," "Unknown Tongues," and "A Trip to the moon;" which will give an idea of the "stray leaves" which have been collected in this book. Within a few years, quite a number of writers have translated for us paragraphs from the Book of Nature, but seldom in as felicitous a manner as has been done by the author of this little volume. It will repay careful study.

The Homœopathic Domestic Physician, and Traveling Medical Companion; containing plain Instructions for Curing Diseases, inculuding those of Females and Children, by Homœopathic Remedies. By Dr. Fred. Gustav Œhme. Concord, Edson C. Eastman, 1859.

This is a full title for a little 16 mo. book of less than two hundred pages, giving a systematically arranged and concise view of the method of practice of Homœopathists, written in clear style, but not especially adapted to the comprehension of the people. As an advertisement for the author, it will doubtless prove satisfactory.

The New American Encyclopædia; a popular Dictionary of General Knowledge; Edited by George Ripley and Charles A. Dana Vol. V., Chartreuse—Cougar. New York, D. Appleton & Co., 1859.

This work, the fifth volume of which we have just received, has been accepted with remarkable favor by the entire press of America; and the present volume fully sustains the reputation achieved by its predecessors.

The best talent in the various departments of knowledge and science has been and is engaged in preparing articles for this gigantic work, which will become the standard, not only as a Scientific Dictionary, but as illustrating the knowledge and talent of American savans and American writers. One hundred and seventy-five individuals have contributed to the volumes already published.

The present volume contains excellent articles on *Cincinnati*, *Columbus*, and *Cleaveland*, furnished by E. D. Mansfield, Esq., author of "American Education," etc.; which are of very great value to those engaged in trade and commerce, or interested as political economists in the growth and prosperity of the country—but of special interest to those who reside in or near those cities. As a matter of interest to our readers, we quote a few lines in regard to our own town.

"While the physical and commercial growth of Cincinnati has been so rapid and great, it has been accompanied by all the means and appliances of social, religious, and intellectual life, found in our American cities. * * * For education, elementary and professional, there are 1 law school, 3 theological schools, 6 (5) Medical Colleges, 4 commercial seminaries, 2 colleges, 3 female colleges, 8 female seminaries, and many seminaries for boys. * * * * The press of Cincinnati is compossed of 8 daily newspapers, 26 weeklies, and 15 monthlies."

We shall have occasion to refer to this great work again, as future volumes appear.

PERIODICALS.

The Knickerbocker Magazine.—In the May number of this sterling old favorite there is published the initial article of a series on "*Adulterations of Food*," as revealed by the Microscope. It is intended to have these articles continued through the entire year. They promise to be of immense value, and of great interest.

The Druggist.—In April there appeared the first number of a Monthly Newspaper for the Trade, which is vigorous, interesting, and apparently on the high road of prosperity. The growing interest of the drug business of Cincinnati, demands, and doubtless will, sustain this periodical. It contains many matters of interest to physicians, and especially to those who dispense their own medicine.

The Science and Art, or the Principles and Practice of Medicine. By J. C. Peters, M. D. William Radde of New York is issuing this work in monthly parts, and judging from the two numbers already re- we infer that it will, when completed, be one of the most interesting ceived works on *Homœopathic* Theory and Practice, ever published.

The author, Dr. Peters, has already proved himself a patient laborer, a student, and clear and comprehensive writer; and as he invites asistance from all parts of the country, we look for the publication of a work of interest and value to the profession. Mechanically, as far as printed, it is issued in excellent form.

Seventh Annual Report of the Trustees of the State Reform School of Connecticut, for the year 1859, etc. The Report is of interest to all, but more especially the citizens of Connecticut, and those particularly interested in the Asylums, Homes, and Schools, which are every where being established for the benefit of Unfortunates.

Medical and Literary Weekly.—The second number of this Journal, published at Atlanta, Ga., gives evidence of an active determination on the part of its publishers, to make a *live* paper of interest to the public.

EDITORIAL ABSTRACTS.

Pneumonia—Quinia.—Dr. Speere writes; "I noticed in the April No. of the COLLEGE JOURNAL an inquiry in regard to the use of quinia in pneumonia. I am accustomed to treat common or uncomplicated cases of pneumonia as follows:—

When the stomach and bowels are properly prepared, I give tincture of veratrum viride and sulphate of quinia alternately, once in two hours, for two days, and complete the treatment by the use of expectorants and mild tonics. The average duration of treatment is about five days.

Eupatorium perfoliatum in Intermittent Fever.—Dr. Pretsch, a Homœopathic practitioner in New Jersey, after having given "several remedies without any effect whatever" to a patient laboring under intermittent fever, went to a neighboring pond and gathered some stalks of eupatorium and gave them to the patient with directions to make an infusion of it and drink of it. In two days the patient was entirely well.

Frasera Carolinenses.—Dr. Lungreen, of North Carolina, thinks that American Columbo is not sufficiently esteemed by the profession. He says in sickness of the stomach, incident to pregnancy, it acts "like a charm." He combines it with other articles, as valerian, or conium, when those agents are also indicated.

Constipation in Infants.—If the nursing child is constipated, the natural inference is, that the food is not fully adapted to its wants; and frequently, on chemical examination, the breast milk is found to be deficient in sugar. When that is the case a small quantity of loaf sugar dissolved in water, and given the infant, will supply the material for the formation of lactic acid, which will render the caseine of the milk digestible, and thus relieve the constipation.

Hypophosphate of Quinia.—Prof. J. Lawrence Smith, of Louisville, proposes the hyphosphate of quinia, as useful in phthisis and analagous diseases. It has not yet been fairly tried.

Pessaries.—Weatherby thinks the pessary is more absurd in its use than the speculum, and doubts if its use ever cured a case of prolapsus. In patients whose sedentary habits predispose them to uterine derangements, he thinks the prolapsus can be cured, not by introducing a pessary and sending the patient to bed; but by using rational means to subdue any disease of the organ, and giving tone to the debilitated and relaxed tissues.

MISCELLANY.

POISONING BY NICOTINE—DEATH OF MR. WITT.

Sometime since, Mr. Henry Matthew Witt, a young chemist of note, put an end to his life by taking a dose of *Nicotina*, a poisonous alkaloid procured from tobacco. Mr. Witt, it appears, while a boy was apprenticed to a member of the London pharmaceutical society, with a view to becoming a practical pharmaceutist. During his apprenticeship he evinced a strong desire for scientific study, in which he was indulged by his employer; and entering the School of Pharmacy, proved himself a student of talent and industry. He concluded, however, to abandon the practice of pharmacy, and to devote his energies to scientific chemistry. He therefore entered the Royal College of Chemistry, and was a short time afterwards appointed assistant to Dr. Hofmann. While acting as Dr. Hofmann's assistant, he was appointed by Government in conjunction with that gentleman, to examine the condition of the Thames and report what influence the sewerage of London exerted upon that stream. It is believed that he also rendered valuable assistance to Dr. Hofmann in the revision of Fownes' Manual of Chemistry. Not long before his death he entered into an arrangement to assist Mr. Watt in revising Dr. Ure's Dictionary of Chemistry. To accomplish this latter undertaking he resigned his position as assistant to Dr. Hofmann. Mr. Witt now found his time fully, if not too fully occupied. In the future there loomed up a prospect of increasing honor, which overpowered his nervous system. His great success, and the magnitude of the responsibilities resting upon him, caused a distrust, a loss of confidence in himself, and led him to abandon his engagement with Mr. Watt and to apply for his old and less responsible post of assistant at the Royal College. And not satisfied with retracing his steps thus far, he seriously contemplated a return to his original occupation of pharmacy. But each step which he retraced seemed but to add to his malady, and on the 19th of June last, he was found by the porter of the Royal College in the last agonies of death, resulting from the poisonous properties of a dose of nicotina. At the inquest held over the body, Dr. Hofmann stated that he had procured two grains of nicotina from one hundred grains of snuff, and that about one grain was sufficient to cause the death of an adult. The London Pharmaceutical Journal states that this is the only case on record of poisoning with nicotina, which has occurred in Great Britan.

STATISTICAL REPORT OF DEATHS AFTER AMPUTATION.

At a late meeting of the *Royal Medical and Chirurgical Society*, London, Thomas Bryant, assistant surgeon to Guy's Hospital, made an interesting report, which appears in the *Lancet*, concerning the causes of death after amputation; and presented a somewhat detailed account of the death-rate in this department of Surgery. Three hundred cases are considered in the report, all of which are taken from the records of Guy's Hospital. Mr. Bryant was enabled from data at his command, to report, that 27 per cent, on an average, of all thigh amputations had resulted fatally. Pathological amputations of the thigh, or such as were performed to get rid of diseases of the articulations and bones, were least so, only 18 per cent. of them proving fatal. Amputations of the thigh through expediency,—by which is understood the removal of a limb to get rid of tumors, talipes, elephantiasis, and deformities,—are fatal at the rate of 31 per cent. Traumatic amputations of the thigh, or removal of a limb after injuries, prove fatal in 67½ per cent. It was remarked that in thigh amputation for the relief of chronic disease of the knee-joint, one case out of seven proved fatal, or about 14.5 per cent.; but for acute suppuration, a fatal termination was the rule.

In amputations of the leg, 37 per cent. result fatally, or 10 per cent. more than after amputation of the thigh; the amputations of expediency and traumatic amputations being more fatal and frequent than the pathological. And what is worthy of consideration, especially as regards the management of such cases, pyæmia is reported, taking all amputations of the leg together, as being the cause of death in 42 per cent. of the fatal cases. Pyæmia is also put down as the cause of death in a large share of the fatal cases following all amputations. The real condition constituting pyæmia is not well understood; nor does Mr. Bryant make any observations upon this disease, or state of disease. The term signifies an admixture of pus with the blood; but the origin of the pus, and its manner of entering the vessels, have been the subject of much discussion. It is commonly supposed that the pus globules are too large to pass through the meshes of vein, or lymphatic, yet this supposition does not preclude the idea that the pus cells may first be broken down by the process of decomposition that may be going on at the time; nor will their size prevent them from entering the mouths of the divided veins which always have more or less purulent fluid about them in a recently amputated stump. Besides, there may be inflammation of the veins of the stump, it being produced by the surgeon's wound, or the disease for which the limb was amputated, constituting *suppurative phlebitis.*

It is well known that pus in a certain stage of decomposition, when introduced into the circulation of a healthy individual, will *sometimes* produce symptoms of blood poisoning. A surgeon dressing a burn which is attended with much suppuration, if he have an abrasion about the fingers, is in danger of becoming severely poisoned. The symptoms of the disease thus produced, resemble those of pyæmia as generally described by authors. As soon as the virus developes itself, a febrile state, with cerebral disturbance, is ushered in, and a train of phenomena soon shows the *typhus* character of the malady.

In cases of pyæmia after amputation, it is noticed that the suppuration at the stump subsides. This circumstance has led not a few to declare that the pus was absorbed as fast as it was produced. A view, however, that is not entertained by many at the present day, it being generally understood that the character of the fever is so devitalizing that very little, if any, reparative material, which in a state of degeneration constitutes pus, is furnished to the wound. The secondary or *metastatic abscesses*, then, which are often rapidly formed during the progress of pyæmic fever, do not arise from the absorption of pus from a suppurating surface and the deposit of it in or about the viscera, but probably have some other origin. It may be remarked in this connection, that these secondary abscesses form within or near the thorax where the state of vitality is the highest. The question then arises, whence come the visceral, pyæmic abscesses? There seems no plausible reason for their developement, except it be that the pus is produced along the hæmal surface of the veins, the vitality of the system being too low for active phlebitis; but a degree of irritation is excited in the vessels by the presence of blood-poison, which under the circumstances, may result in the genesis of pus cells. The patient usually sinks rapidly after this stage of the disease is reached, as he has even for some time previously, death being the almost inevitable result. Pyæmia is a form of disease frequently met in the hospitals of Europe, but seldom occurs in the United States. The success of amputations in this country as compared with that of Europe, depends not a little upon the circumstance that pyæmia is much more common abroad than at home.

Mr. Bryant's report shows a fatality of 10 per cent. after amputations of the upper extremities;—that one-third of the fatal cases die from pyæmia; one-third from some traumatic complication; and the remaining third from secondary hæmorrhage or visceral disease.

If an American Surgeon were to lose such a large per cent. of cases after amputation as is represented in this English report, his reputation would soon suffer severely. It must be considered that this is a *hospital* report from a great metropolis. Patients in hospitals never endure operations as well as in private practice, especially in the country.

Such reports are of exceeding value to the profession, coming as they do from sources that can be relied on. Physicians are apt to forget unsuccessful practice, reporting only fortunate cases.

"TRAGEDY WITH A MORAL."

UNDER the above heading, the May issue of the *London Lancet* contains a short account of a case of mal-practice of an exceedingly aggravated character. It was perpetrated at East Hetton, in Durham, by a Surgeon by the name of Wm. M'Hugh, who, according to the testimony of several witnesses, was intoxicated at the time. The circumstances of the case were as followes: A woman supposed to be in labor of a protracted nature, was waited upon by M'Hugh, who without consideration, proceeded to perform the operation of craniotomy. He introduced the perforator and crotchet several times, causing considerable hæmorrhage. *A piece of flesh was pulled away* during one attempt, upon which he remarked "I believe I have gone through the walls of the uterus." He again introduced the perforator, opening the blades very widely. A gush of arterial blood flowed, and the woman expired almost instantly. He then proposed to perform the Cæsarean operation to extract the child, but, laying his hand upon the abdomen of the deceased woman, he remarked; "She is not with child at all; or if she is, it is a devilish little one."

Such butchery was judicially pronounced worth one year's imprisonment. It is fortunate for him that he was "regular" in the profession.

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ORIGINAL CONTRIBUTIONS.

NOTES AND COMMENTS.

BY T. C. MILLER, M. D.

Concentrated Medicines.—In this latitude (Tennessee) some of the so called *concentrated* preparations will not keep well. Even podophyllin will not stand the test. I have bought three bottles, and each moulded in the vial, notwithstanding it was well corked and capped. I do not find any of them as satisfactory as the tinctures and infusions of the crude articles.

I am satisfied that some of the tinctures should be made as directed by Rademacher's method, (especially from narcotic plants,) by using the expressed juice of the green herb, while others might be prepared as usual.

I admire men who are truly Eclectic; but can feel no admiration for those men who oppose all who do not look to themselves as leaders—men who boast of their success in practice by the use of the Keith & Co. preparations. Such men, I compare with the agents they use, and I have swallowed half an ounce of their so-called *Scutellarin* upon an empty stomach, without any disturbance whatever, except a taste of bad magnesia in my mouth.

Cajeput Oil in Infantile Convulsions. A child two years old was attacked with convulsions, caused by intestinal worms. Medicines were with great difficulty administered, and produced but little influence. I applied cajeput oil around the umbilicus, and in ten minutes the convulsions ceased and did not return.

Phthisis Hepatica. When in consequences of acute or chronic inflammation, or in tubercular deposits in that organ, and a hectic fever accompanies the suppuration which occurs, we call that condition *consumption of the liver.* In such cases the sensation of suffering is very obscure. A sense of pain and swelling will be felt in the region of the liver, and usually that pain extends to the right leg or arm, with an increase on lying upon the left side. There may be a jaundiced appearance of the eyes and skin, with cough, unnatural stools, and constipation, to be followed after a time with diarrhœa; when the fœces will contain pus mixed with the pigment of the bile. The urine contains also a yellowish mixture of broken down tissue, bile, and perhaps broken pus globules.

The digestive organs are somewhat disturbed. The lungs are affected, but only secondarily; but this complication in time becomes the most prominent feature of the disease. Finally, there is hectic fever, with rapid emaciation, œdema of the feet, and at last, perhaps, general dropsy. This is the disease erroniously styled by Dr. Wilson Philips *Dyspeptic Phthisis.*

The indications of treatment for the restoration of lost structure of the liver, strengthening the patient, and suppression of the fever and cough, are similar to those in phthisis pulmonalis. If the destruction of the liver has not too far advanced, the syrup of bloodroot will prove of very great utility. In the destructive or suppurative stage it is absolutely necessary to avoid the use of active cathartics, and to be exceedingly cautious in regard to diet, so as to avoid both constipation, and diarrhœa.

Phthisis Lienis. Consumption of the spleen occurs only after acute or chronic inflammation of the gland; and particularly when the organ has become indurated, or there are nodulations in it. This condition is manifested through a feeling of tenderness on pressure, a heaviness in the left hypochondrium, with a dirty grayish discoloration of the skin, a disturbance of the organs and function of digestion, melancholy, cough, with final hectic fever and dropsy, and at last, perhaps, rupture of an abscess in the spleen, and death.

In the treatment of this disease, I have observed cod-liver oil to be quite useful, applied externally. So also, has the bi-carbonate of iron proved of benefit. To overcome the cough and diarrhœa I have given pulverized charcoal in small doses, and conium maculatum in powder, a grain at a dose, four times a day. The diet must be very nutritious, but not stimulating.

Phthisis Pancreatica. Consumption of the pancreas is mostly the result of acute inflammation of that gland. The symptoms are very obscure. A dull, but stinging pain in the epigastrium, the pulse cordy, with a swelling in the umbilical region, great disturbance of the digestive function, cough, a flow of disagreeably tasting fluid into the mouth, vomiting of bile, fœtid and purulent discharges from the bowels, general cachexy with a dropsical appearance, and hectic fever, make up the distinctive appearances.

The disease appears to be incurable, but treatment may give relief to the troublesome symptoms. When the bowels are constipated I often give juglandin. Morphia, or other preparations of opium prove benificial. When diarrhœa is present, I find tannic acid combined with an opiate, quite valuable.

The remedy which I have found best for *general* treatment, is iodide of potassium. It has increased the appetite, put a stop to the vomiting, and relieved the cough, I prepare it as follows:

℞. Iodide of Potassium ʒjss.
Water, distilled, f℥j. M.

Of this solution, I order ten drops at a dose, to be repeated four times a day.

In regard to these three forms of phthisis, Prof. Rademacher says: "The lungs are secondarily affected through the primary disease of the organs within the abdominal cavity. In those cases there will at times be spitting of blood, and other symptoms of the pulmonary derangement."

Diseases of the liver and spleen and pancreas, are mistaken for disease of the lungs, and the patient dies, actually with phthisis pulmonalis, but the lung disease is secondary to the primary affection. Sometimes the lung has a chronic difficulty, which is aggravated and rendered more active by the derangement in the other organ.

The chronic inflammation of an abdominal organ, may also be increased by a difficulty in the lungs, and abscess be thus formed. Or, the embarassments to the abdominal circulation, caused by inflammation or abscess in one of these important organs, may produce an accumulation of blood in the lungs.

When these conditions obtain, a slight occasion may cause bursting of one or more important blood vessel. The ruptured vessel pours blood into the neighboring tissues, and the extravasated fluid is liable to soften, and to produce suppuration and abscess in the tissues thus engorged. In this way, abscesses in the lungs are often commenced.

In secondary affections of the lungs, as well as in primary ones, it takes time for abscesses to form, for the processes of softening are comparatively slow in their manifestation.

In the treatment of these difficulties, we have to discover and relieve the primary difficulty, which is always somewhat obscurely manifested, and often masked by the more prominent and notable pulmonary difficulties. If, after a little, we become satisfied that we were mistaken, and that the disease is in reality confined to the pulmonary organs, no harm will come of our caution, for it cannot lead to an injurious method of treatment. Disease of the lungs always leads to a derangement of all the fluids, and consequently of the more important organs of the system may require care and appropriate medication.

Mercury in Typhoid Fever. A late German writer, Dr. Müller, who belongs to the extreme old school, when writing in regard to the treatment of typhoid fever, said: "Notwithstanding the high encomiums of some French writers, they could never pursuade us Germans, to become Red Republicans to suffering humanity.

Considered from a rational point of view, mercury proves always a deceitful, and often a dangerous agent. Typhoid fever is often rapid and severe in its progress, particularly from dietetical and therapeutical errors. The early constipated condition of the bowels, by such errors, is changed to an unmanageable diarrhœa, and when the physician prescribes a mercurial laxative, he gives an order for a coffin."

Phytollacca Decandra in Uterine Leucorrhœa I succeeded in two cases, in curing this disease with the tincture of the poke root, after I had failed of a cure in the use of other measures. I made use of it internally only. I find the phytollacca also useful in asthma,—the metastatic, and senile forms—but not in the spasmodic form of the disease.

Annica in Hæmorrhoids. I think the external application of the tincture of arnica very useful in hæmorrhoids.

Solidago odora. This is a valuable agent in some forms of disease of the kidneys. It may be given to the amount of half an ounce in twenty-four hours, in the form of an infusion.

Lumbago. In a very obstinate case of lumbago, after the use of other means without success, I relieved my patient by a combination of tinctures of cimicifuga and gelseminum. Aconite had been previously used, and external remedies appeared to increase the pain.

TINCTURE OF MACE. This is made by adding two ounces of pulverized mace to one pint of dilute alcohol, and allowing it to steep fourteen days, and filter. It is very valuable in some forms of dyspepsia, in vomiting, in chronic diarrhœa, and debility of the digestive tube. The dose is from ten to twenty-five drops, repeated several times a day.

DYSMENORRHŒA. In plethoric aspastic patients I have used:

℞. Borax, ʒj.
Gelseminum Tincture, f℥j. M.

of this I gave twenty-five drops each hour, until relief was obtained.

DYSENTERY—ACONITE. I wish to call the attention of the profession to the tincture of aconite root, in the treatment of epidemic dysentery. [See the last COLLEGE JOURNAL, Eds.] I have used it in some cases with benefit, where the tincture of gelseminum failed to give ease. Infusion of valerian makes a valuable injection in tenesmus.

TINCTURE OF GELSEMINUM. I have recently used gelseminum in vomiting of blood, in hæmoptisis, menorrhagia, cardialgia, in infantile convulsions, enteritis, and other erethisms of various parts of the system. In two cases of cardialgia, I found the following combination of great service:

℞. Ext. Belladonna, grs. iij.
Tinct. Gelseminum, f℥ ss. M.

To be given in doses of fifteen drops four times daily. Or

℞. Extract of Pulsatilla, gr. j.
Tinct. Gelseminum, f℥ ss. M.

The dose of this was fifteen drops once in two hours.

In infantile convulsions, to make a proper impression on the nervous system and to control the convulsive moment, I find it superior to hydrocyanic acid, and far less objectionable.

In enteritis, I have observed the patient to recover rapidy, under the use of small doses of gelseminum given in an oil emulsion. That there may not be supposed to have been any error in the diagnosis, I will observe that two other physicians also attended the patient.

In gastritis, I found gelseminum as valuable as in enteritis, give in the same way; and I have no doubt of its value in cholera infantum where there is also more or less gastro-enteritis. In a case of hoarseness where the vocal difficulty was complicated with catarrhal fever, gelseminum tincture quickly gave relief.

DIABETES. I have found the phosphate of iron, as recommended by Dr. Smith, of very great utility in this disease.

Sesqui-Chloride of Iron. The tincture, mixed with water, in the proportions of one fluid drachm to twelve fluid ounces of water, and given in doses of a table-spoonful every fifteen to thirty minutes, is very efficacious to restrain uterine hæmorrhage, hæmorrhage from the bowels in typhus fever, and hæmorrhage from the lungs.

Iron in Scarlatina. In various Medical Journals, I observe that Dr. Bishop's mode of using iron in this disease is named. I have made use of the tincture of the acetate of iron, as taught by Rademacher and given in the College Journal Vol. II, 450 by my brother, Dr. L. E. Miller, for fourteen years; Prof. Rademacher used it forty years since. In 1854, Dr. Byford of Savannah, published that he had used the tincture of the chloride of iron with success in this disease. In the year 1851, I offered for publication an article on the use of iron in scarlatina; but the article was rejected, as too "orthodox," although I had not lost a single patient during an entire epidemic. So much for the recent claim of originality in this mode of treatment of scarlet fever.

Veratrum Viride in Delirium Tremens. In strong, plethoric patients it is valuable; but not in those of a debilitated or broken-down constitution.

Chronic Diarrhœa. For many years I have made use of the following:

℞. Ipecac, pulv., grs. iij.
Tris Nitrate of Bismuth, grs. xxiv.
Ext. Nux Vomica, grs. jss.
Sugar of Milk, grs. xxx. M.

Divide into six papers, and give one three times a day.

Acids in Intermittents. Two years since, Dr. Bailey of Indiana, lauded quite highly the use of the commercial nitric acid in doses of from five to eight drops, properly diluted, repeated once in six hours.

Elixor vitriol has for a long time been in use by the profession in this form of disease. In 1812, Hopp lauded muriatic acid in all diseases of a miasmatic origin. So also did Joerdens in *Hufeland's Journal.*

In the College Journal for Nov. 1858, I made some remarks on the claim of Dr. Arnold of Montreal, as originating the use of nitric acid in whooping cough. I there said that dilute nitric acid produces similar effects to those of the other mineral acids upon the general system; but that it causes more disturbance of the digestive organs; which well-established fact had led to its being seldom used internally by European physicians.

Bleeding in Affections of the Chest. The celebrated German practitioner and author,— C. G. Neumann, gives utterance to his convictions in regard to this matter, as follows: "The most absurd and destructive practice in affections of the chest, is venesection; and it is time that the miserable quacks who do not know any other practice in these diseases but bleeding, were properly exposed before the public, that their murders may be punished by due process of law; or if not punishable by law, that their consciences be allowed free play.

When the fluid portion of the blood is removed by night sweats, the proper treatment demands nutrition. But these quacks bleed, and debilitate. The chest is easily affected by excitation of the nerves, and such excitement produces frequency of the pulse, and then these people, fearing a spasm, or fever—bleed. I would advise the public to ask the advice of rational physicians, but to utterly repudiate such quacks and vampires."

CASES OF POISONING.

BY S. P. HUBBARD, M. D.

Case 1. A child, aged 10 months, had, through a mistake, taken a large teaspoonful of laudanum instead of paragoric elixir. On my arrival, the pulse was not perceptible at the wrist; the respirations were about eight to a minute.

As the child could not swallow, I passed my finger down its throat so as to press down the epiglottis, and poured down about an ounce of a mixture prepared by steeping lobelia seed in *hot drops*. I then poured into the stomach as much warm warm as that viscus would contain; and placing my hand over the stomach, I turned the child on its face, when about a tea cup full of liquid ran out of its month.

I then poured into its stomach about two fluid ounces of the tincture of lobelia herb. After a few minutes the force of the circulation was increased so as to make the pulse perceptible at the wrist, I then gave strong coffee in which there was plenty of the lobelia tincture, and in six hours the narcotism had disappeared.

Case II. Mrs. W., for the purpose of producing abortion, had taken a large teaspoonful of the oil of tansy. I saw her about four hours after the oil had been swallowed. She was delirious, and in great distress. Her face was flushed, and her pulse very rapid.

I commenced treatment by giving the tincture of lobelia herb undiluted. As this did not appear to produce much effect, I gave her a mixture of hot drops and a saturated tincture of lobelia seed in equal proportions. Very soon she vomited. I then gave her milk, sweet oil, and lobelia, so as to keep up thorough emesis. After she had vomited continuously for about six hours, she appeared to recover from the influence of the oil of tansy; and she gradually rallied so as to be able to sit up some the next day. She did not miscarry, although she was nearly five months advanced in pregnancy.

EFFECTS OF LIGHT ON MEDICINAL SUBSTANCES.

BY PROF. J. EMERSON KENT.

It has been long known that marked changes are produced by the continued exposure of medical preparations to the influence of daylight; changes not alone of color, but of medicinal properties. To illustrate,—ginger loses its yellow color, becoming white, and devoid of pungency. The powdered leaves of hemlock, foxglove, and henbane, soon assume a dirty yellow tinge, with a greater or less degree of loss of their active properties. The powders of ipecacuanha, and of jalap, become pale and are rendered almost inert. The tinctures of kino, catechu, cascarilla, cinchona, veratrum viride, and gelseminum, deposit upon the side of the bottle most exposed to the light, much of the matters held in solution. Upon chemical preparations many important changes are effected, which I need not now enumerate; while the action of diffused, or subdued light upon the hydrocyanic acid is, or should be, familiar to every practitioner. The bleaching of wax and fixed oils is well known; but the influence of light upon the resins, (with the exception of guaiacum) and the resinoids, was unknown, until developed by photographic researches.

My object in this article is to lay before the readers of the Journal some very important facts, designed to prove that *light* alone is not the active agent in the production of these changes; but that they depend mainly upon other rays in the sun-beam, and but little, if at all, upon the luminous ray. The following experiment, and the conditions under which they were made, are full of interest, and will illustrate the subject under consideration. The bright green powder of the leaves of numerous medicinal plants, carefully dried, and powdered *in the dark*, was placed in dry and warm glass tubes, which were immediately sealed. Some of these tubes were carefully protected from the light for the purpose of comparison with those exposed, day after day, to the action of rays of a prismatic spectrum, maintained in position by a heliustat. The tubes were so arranged as to retain each under the action of a definite ray. In some instances a tube was placed in each of the seven rays of the spectrum, but usually three only were employed corresponding to the three primitive colors in the solar beam, the *red*, the *yellow*, and the *blue*. These experiments have proved that the three great phenomena of the solar radiations, *light*, *heat*, *and chemical action*, have their centres of maximum power in three distinct portions of the spectrum; the red ray yielding the largest amount of calorific power, the maximum of light residing in the yellow-rays, while the chemical power is greatest in the blue rays; and it is susceptible of demonstration that the chemical rays act equally well in the dark, as in daylight. It will be hence seen that the powders under examination, were submitted to the influence of the heat of the solar beam, to its light, and to its chemical, or *actinic* power.

It soon became apparent that the decolorization of green vegetable powders was not attributable to the action of *light*, for the powders exposed to the full intensity of the yellow, or luminous rays, underwent no change; the alteration of color was in most cases, (not in all) first seen under the influence of the *red* rays, although no great difference was discernable between the action of the *red* and the *blue* rays, or in other words, between the calorific and chemical rays of the solar beam. When two spectra were so arranged, that the blue ray of the one fell upon the red ray of the other, the powders were much more rapidly decolorized. The bleaching of the brown and yellow powders, jalap, bark, and ginger, is effected almost wholly by the blue, or chemical rays. The chemical examinaions of bleached powders indicate that oxygen is absorbed under the action of the chemical rays, while the calorific rays mainly exert their power in removing therefrom an atom of combined water; and the chemist can readily perceive how very important the changes effected in the constitution of organic bodies must be, when we bear in mind the great differences in medicinal and nutritive effects produced in known chemical compounds, by the addition or subtraction of a single atom of the elements of water, or of oxygen.

These remarks and results are equally applicable to the resins, the resinoids, and the oils. The bleaching of the fixed oils is (almost) wholly attributable to the blue rays; and although the thermic rays produce an appreciable effect upon the resins, it bears no comparison to the action of the actinic rays. The conversion of linseed oil, under atmospheric influence, into a substance resembling caoutchouc, is greatly modified by the action of the solar beam, the blue rays accelerating the absorption of oxygen, while the yellow and red rays retard it.

All the changes (yet examined) upon the salts of the metallic oxides, are attributable to the blue and violet rays, their alterations in color and character depending upon the liberation of one atom of the gaseous element from the compound.

The decomposition of hydrocyanic acid is due to the action of the blue or chemical rays, for in those rays the process of transformation is very rapid. The result is the formation of ammonia, and the precipitation of a brown powder apparently a compound of nitrogen and carbon.

It is a common practice for druggists and manufactures, to put those pharmaceutical preparations, which are liable to change by the *supposed action of light*, into dark blue, or purple bottles, or to cover white glass bottles with blue paper,—impressed with the fallacious idea that the quantity of light thus admitted is so small as to preclude change. But we have seen that no more effective method for the developement of the feared chemical change could have been adopted than the employment of the blue glass. The luminous rays actually retard chemical change,—they are obstructed by the dark blue glass, and the nearly isolated chemical rays are permitted to act on the preparations with almost their whole energy. If instead of blue glass, bottles of a dark green color (common porter bottle glass) were employed, the danger of chemical decomposition from solar radiation would be almost wholly obviated; for such bottles would not only to a great extent obstruct the luminous rays, but the calorific rays would be nearly all excluded, and the *actinic*, or chemical rays would be greatly reduced in amount and modified in activity. In bleaching oils, blue or purple bottles will be found greatly to accelerate the result.

In the light of these facts we also find the cause of the frequent inefficieny of some medicines, and the occasional augmented effects of others; and they also furnish us with a clue to the solution of the wide differences of opinion which exist amongst medical men, in relation to efficiency or non-efficiency, and the safety or non-safety, of many of our most valuable remedies.

CONCEPTION.

BY GEO. W. FACKLER, M. D.

This is a subject that has engrossed my mind more than any other branch of human physiology, and I cannot remain satisfied with the now generally received theory of conception—because it is positively incompatible with evidences of our senses. We see facts every day which the theory, as now advocated by most modern pysiologists, does not explain; and it may appear presumptuous in me to attempt to unravel as deep a mystery as the one under consideration—but in the language of one of old, " All *great* men are not *wise*, therefore I will shew mine opinion."

In the first place, let us consider what *is* the adopted hypothesis (for it is nothing else) of our modern physiologists.

The theory of Pythagorus and Aristotle is the one now most commonly adopted. This theory, Dr. Allen Tompson, in his paper on Generation, terms the theory of the *ovists*. In this the female parent is held to afford all the materials necessary for the formation of the new being—the male doing no more than awakening the formative powers possessed by, and lying dormant in, the female. This is the doctrine that is now taught by modern physiologists, and why this hypothesis should have ever predominated over more rational ones, I cannot conceive. Out of two hundred and sixty-two hypotheses advanced to enlighten us on this subject the majority of them admit of better explanation on some grave points, than the one now adopted. Those who adhere to the doctrine of the ovists have failed so far to tell us why it is, if the female furnishes all the materials for the formation of the new being, that we often see likeness of the male in the offspring. We see this exemplified every day. Why do not the advocates of this doctrine explain important facts. It is no mere coincidence. Kirk and Paget, in their Physiology, acknowledge, speaking of this particular point, that " *it is wholly inexplicable.*" This is an important point, and if it is "wholly inexplicable," why not adopt the more rational hypothesis which explains satisfactorily this point; I allude to the theory of syngenesis, or combination. This theory holds that the male and female parents both furnish simultaneously, some semen or product; that these products unite after sexual union and form the rudiments of the new being. What is there in this theory that is incompatible to the evidences we have in regard to this matter? I believe,—and every intelligent woman will tell you the same, and *their* testimony ought to be considered in these matters,—that it is impossible for a female to conceive while she is perfectly passive, notwithstanding we have authority to the contrary. I believe that the female, at a successful coition, has an emission, though I do not pretend to determine the *nature* of the emission. And here is another strange fact to me; that while every fruitful female will tell you herself that she does emit; physiologists never mention the fact in writing on conception. And I believe that it is utterly impossible for conception to take place unless there is a reciprocacy, and an emission simultaneously with that of the male.

I have conversed with many barren females on this subject, and they invariably acknowledge that they never had experienced a feeling like an emission although they had heard others speak of it. As an illustration of this point, I will relate a circumstance in connection with the subject, which transpired within my own knowledge, and I will vouch for the veracity of it. A gentleman whose wife was rather fruitful, desired to refrain from having any more children. I gave him my views as expressed above, and desired him to give his wife no medicine to prevent child-bearing. My instructions for her to remain *perfectly passive* during the embrace of her husband; that is, to show no reciprocacy of sexual feeling during the act. My instructions were rigidly adhered to by the wife for over a year, when on a certain occasion she gave way to her feelings, had what I term an emission, and expressed herself to her husband that she would become pregnant from that night. In a few days she began to experience morning sickness, and in a short time her pregnancy became fully established. I know of many other similar cases. I did not set out to write an article in vindication of my views on this subject, but to elicit the views of others.

ENCONDROMA.—ELECTRO-MAGNETISM.

BY M. W. HENRY M. D.

This is a cartilaginous tumor of frequent occurrence. It is most commonly found in connection with some of the short bones. It generally occurs as a small, round, hard, smooth, elastic, oval or flattened tumor, seldom exceeding an orange in size. There is a form however which increases in size rapidly, frequently attaining an enormous growth in a few months, and it has been mistaken for encephaloid.

It is the first form that I have most frequently met in my practice.

When it occurs on the bones of the carpus it seldom attains a size greater than that of a pigeon's egg. I have seen it disable and disfigure the wrist very much. It often causes much uneasiness of mind in the person who has it, and we generally find him anxious to have it removed.

Various means have been resorted to in the treatment; such as amputation of the affected part, excision of the tumor, compression, and electro-magnetism. Where the tumor is attached to a bone, the removal of the tumor will not generally prevent its return, unless the bone is extirpated. The amputation of the bone frequently results in greater injury than the tumor would have caused, if it had been allowed to remain unmolested. Excision of the tumor may be successfully practiced where it is unconnected with any of the osseous structures. Compression will fail in many instances in producing absorption.

I have recently used electro-magnetism with the most satisfactory results. I pass the electro-magnetic current through the tumor as strong as the patient can well bear it for about fifteen minutes—twice a day, until the tumor disappears. I have not yet failed in a single instance with this agent, and I am strongly impressed with the opinion that it will prove a most efficient as well as pleasant means of removing those cartilaginous tumors. It appears to act by promoting their absorption. I hope those who have an opportunity will farther test the powers of electro-magnetism over these cases, and report the results of their experiments.

BARK OF THE COTTON ROOT AS AN ECBOLIC.

BY E. W. MAGANN, M. D.

Though much has been said and written upon the influence of this agent in producing contractions of the uterine fibre, yet I am persuaded to lay before the readers of the College Journal the result of my experience of its effects upon the gravid uterus. I am aware that the opinion is entertained by many physicians that it possesses the power of producing abortion at any period of gestation; but the result of my experiments have induced me to entertain a different opinion. And I think if the members of the profession generally would publish the results of their experiments with this agent, more might be known of its *true* value.

I will relate one particular case which may serve as an illustration of the effect which has been invariably produced by it in my hands. I was consulted by a young married lady whose situation was such as to render abortion indispensably necessary. She was about the middle of the third month of utero-gestation, of sound constitution and full habit, with nothing extraordinary about her form or occupation. I applied to Tilden and Co., of New York, for some of their fluid extract of the bark of cotton root, but failed to obtain any. (I had some doubt of the efficacy of a decoction of the dried bark). Failing to obtain the extract, I determined to give the bark a further trial, and obtained half a pound from Walters and Kelso, Dayton, Ohio. I supposed that it was not a genuine article, though I tried it by making a strong decoction and having my patient drink freely without producing the least effect.

Not being satisfied with this, I was with it as the old school are with calomel in disease of the liver, determined to "kill or cure," and so procured of Wm. S. Merrell and Co., of Cincinnati, a pound of what appeared to be a good article of the dried bark. I placed half of it in a convenient vessel on the stove, added half a gallon of water, and boiled down to a quart. The decoction appeared to be well impregnated with the properties of the bark. My patient sat near the stove during the evaporation and inhaled the vapor. While inhaling the vapor she complained of pains in the small of her back, pointing forward and downward. This led me to believe that when she drank the decoction the desired effect would be produced. But when she commenced drinking, and the evaporation ceased, the pains all left. She drank the quart in the short space of two hours, without any return of the pains or any other effect except slight emesis. So I prepared another quart in the same way, and she drank it in the same length of time with exactly the same result. This case with a number of others of a similar character induces me to believe that although there may be a virtue residing in the green root, it is not to be found in the dry.

Note. A similar want of power in cotton root bark, to induce uterine contraction, was reported by Dr. B. C. Smith, in the College Journal for August last. Many observations of a similar result, have been told to us, but not published.—Eds.

THE HYPOPHOSPHITES.

BY J. Z. HALL M. D.

Since the reader is supposed to be aware of the fact that new remedies are frequently the recipients of excessive praise, either owing to their novelty or the interests of their reputed discoverer, it will not be necessary for me to devote space to the discussion of this point. The hypophosphites are not offiicinal preparations. They are not even noticed in the Appendix to the United States Dispensatory; but are mentioned in Prof. King's American Dispensatory. Dr. J. F. Churchill commenced the employment of the hypophosphites in phthisis during the year 1855, hence the time is too brief to establish absolutely, any fact in regard to their therapeutic value. Dr. Churchill claims, in his work entitled *De la Cause Immediate et Treatmen specific de la Phthisie Pulmonaire*, (1857) for the hypophosphites of lime, soda, and potassa, hæmatogenic properties; and that in this respect they are better than any other remedies with which the profession is acquainted. That they increase the quantity and deepen the color of the blood. That under their use, nervous depression, as well as heaviness in the digestive organs disappears, the appetite is increased in a remarkable degree, intestinal evacuations are more regular, the sweatings cease, and the sleep is more calm and profound. The function of nutrition during their administration is increased in activity remarkably, as shown in the rapid growths of the teeth and hair. And that they exert as specific an influence over the tuberculous diathesis as quinia does in intermittents, or iron in chlorosis. If these statements are true or even partially so, they are certainly important. It was in consequence of such assertions that I commenced the use of these remedies.

My prescriptions were based therapeutically upon the asserted facts in Dr. Churchill's work, which my experience thus far, has not contradicted. During the past year I have employed them (technically considered) in a variety of cases, in which a similarity in the remote cause was pathologically inferred, and I think therapeutically proven. There is a physiological equilibrium to be maintained between the blood corpuscles and nervous action. This by the law of supply and demand is constantly subject to interruption, the demand being always proportionate to the expenditure of nervous force, the supply being proportionate to the quantity and quality of the red corpuscles. The supply being in a greater or less degree disproportionate to the demand, the fact is announced through the nerves by a greater or less intensity of aches. Upon the hypothesis that the hypophosphites would restore this equilibrium, I have prescribed them in anæmia, in adynamic fevers, pleuritis, bronchitis, incipient rheumatism, cephalalgia, cardialgia, neuralgia, and purulent ophthalmia, with more or less benefit. Glycerine being an expectorant and solvent, is a good adjuvant. The glycerine made by Mr. Parrish of Philadelphia is almost a specific in coughs, and colds.

In a case of accute bronchitis, the following was administered with benefit:

℞. Tinc. Veratrum viride, f℥j.
Glycerine, f℥jj.
Simple Syrup, f℥j.
Hypophosphite of Soda.
Hypophosphite of Potassa, āā ʒss. M.

Dose a teaspoonful every three hours. All signs and symptoms disappeared rapidly, and in eight days the patient was entirely well. I have a case of tubercle under the treatment but not ready to report.

To the most important question, of whether the hypophosphites are a specific or prophylactic in tubercle, Dr. C. says, "Whatever may be the result of an examination of the question in detail, I think that these new remedies will fulfill the conditions expressed in my therapeutic formula, which is;—Such a combination of phosphorus as shall be assimulable and oxydizable at the same time."

This postulate or formula as he calls it, is thus expressed:

"The tuberculous diathesis is dependant upon a diminution in the economy of the phosphorized constituents, and this element having to play the part of a combustible body, ought to be in a degree of oxydation below phosphoric acid." Dr. Rees, ideas published in Brewster's Philosophical Magazine No. 219, are; that phosphorus exists in the corpuscles of venous blood combined with fat and hematoxin, and that being oxydized in the pulmonary cells, it is transformed in to phosphoric acid, which combines with the salt of soda in the serum, producing the change of color characteristic of arterial blood.

He says, (page 224): "The objection against the specific character of the hypophosphites drawn from the fact that phthisis is sometimes self curative, or by other means, is of no value, and could be employed against the best established facts in therapeutics. The same thing is true of other diseases. Intermittent fevers are cured without quinia, and chlorosis without iron. This does not prove that quinia is not a specific in miasmatic diseases, or iron in anæmia, or the hypophosphites in tuberculosis. The spontaneous cure of phthisis is a proof of my theory, since by it the curative powers which experience has heretofore attached to remedies of real value, are accounted for."

With reference to the preference of one of these salts over another, Dr. Churchill recommends the hypophosphites of lime and soda; as those of potassa and ammonia produce excessive expectoration, and bring on signs of softening of the tubucular deposit, which accords with the vital action so far known of these two basis. He would recommend them to be employed for the resolution of old inflammations even in non-tuberculous subjects. He mentions a case of asthma, where the hypophosphite of potassa was used with benefit. The hypophosphite of ammonia has a special influence on the hepatic secretion.

Dr. Churchill's treatment in the thirty-five cases reported in the *Memoire*, was almost invariably commenced by the administration of the hypophosphite of lime, which was continued until signs of plethora appeared; when the hypophosphite of soda was substituted, as the latter appears to have a less energetic action. Every ten or fifteen days, the treatment was suspended for a day or two, and then resumed. When the hypophosphite of lime diminished expectoration as it sometimes does, it was discontinued and that of soda substituted. "The hypophosphite of iron should be prescribed with caution, as in many cases where the ferruginous preparations were prescribed concurrently with the other hypophosphites, pains, inflammations, and hemorrhage ensued. The association of iron with hypophosphoric acid, cannot be considered an anti-tuberculous remedy, as the quantity of iron necessary to saturate a dose of the acid would be positively injurious, and could not safely be repeated."

This remark is applicable to other bases, which need to be administered in very small doses.

Messrs. Ranseau, at Dr. Churchill's request. manufactured the hypophosphate of quinia, an amorphous salt of a yellowish orange color, having the consistence of soft wax and the bitter taste of the other salt of quinia. This he recommends as a remedy in yellow fever and cholera, for reasons hereafter to be stated.

The dose of these preparations as administered by Dr. Churchill, was one gramme (about sixteen grains) of the hypophosphite of lime and soda, given at one time each day. In many cases he gave at the commencement half a gramme twice a day, gradually increasing the dose. His first experiments were upon himself, commencing with half a gramme and increasing to six without experiencing any physiological inconvenience.

Dr. Basilius Sawitsch, in 1854, took in a solution of sugar, two grammes of phosphoric acid. On the second day after he took of the same two grammes and eight decagra. or about forty grains, equal to twenty-four grains of the anhydrous acid without experiencing any alteration of health. Dr. Churchill gave the hypophosphite of ammonia in doses of about one fourth the quantity of the salts of lime and soda. The hypophosphite of potassa, was given in doses from one gramme to eight. These salts are liable to impurities from the present mode of manufacture. The hypophosphite of lime is frequently mixed with the hypophosphites of magnesia and potassa. That of soda sometimes contains the carbonate or sulphate of soda, or the hypophosphate of baryta. Each of these salts may contain the carbonate, or phosphate of lime. There are samples composed almost exclusively of the latter salts. It is easy to perceive that such impurities are injurious. To this point I wish to call the attention of practitioners. I have received one specimen from England very impure.

In his Memoir, Dr. Churchill says: "It can be shown that many diseases, and more especially diatheses, have as an essential condition, a modification of the fluids prior to any special anatomical lesion; that physicial lesions once established, have their proper evolution; consequently each diathesis offers a double problem, that which embraces phenomena, signs, and march of the disease, and that which relates to signs and progress of resulting lesions."

In diseases of a chronic type, it is probable that the primitive alteration consists essentially in a modification of the proportions of the inorganic elements of the fluids.

"The etiology of tuberculosis can be summed up in a single word: *exhaustion*, chronic, constant, or repeated."

"The physiological and therapeutical action of most medicinal agents, if not mechanically or chemically explained, can be by a kind of substitution, analagous to the law of substitution in chemistry, each of the elements being replaced by a homologous substance. In like manner as there are homologues in chemistry, there should be also in therapeutics. In this manner the explanation may be sought, of the incontestible influence of arsenic and antimony on phthisis, the homologues of phosphorus, and the therapeutic effects of iodine and bromine the chemical homologues of chlorine and fluorine." The therapeutic action of quinia in all probability is effected by substitution, as the frequency of relapse occurring after its administration would seem to indicate, it being almost always necessary to use other remedies in order to effect a permanent cure. The explanation of so many similar cures performed by a variety of remedies is thus accounted for.

ALKALIES.

BY PROF. C. H. CLEAVELAND.

The term *Alkalies* is used to designate those preparations obtained from the vegetable, mineral, or animal kingdoms, which are characterised by being positive electrics—by their neutralising acids, a ready solubility in water, and by their powers of restoring to the natural hue the vegetable colors which have been changed by acids.

The alkalies which are used in medicine are potassa, ammonia, soda, lime, and magnesia, and their carbonates, and *neutral* acetates, citrates, and tartrates. To this list might be added lithia and its carbonates, but this mineral has not been used in medicine.

These medicines are natural to the blood, and in a state of health always are to be found in that fluid; and to their presence the blood owes its character as a positive electric, and its alkaline reaction.

As they are all soluble they can readily pass without change into the blood. That they exist unchanged in that fluid, is proved from the fact that they have all been found in the excretions from the blood. They do not always remain unchanged, for the neutral salts readily combine with the carbonic acid of the system, or with only the oxygen so as to be changed into carbonates or bicarbonates of the basic earth.

Alkalies are the opposite of Acids both electrically and chemically, and as medicines they produce nearly the opposite effects on the system to those which follow the use of acids. In the present paper they will be considered as *Restoratives*, although like their opposites they perform several functions in the system, and may be administered to fulfil several indications.

The acids when taken into the system tend to change the albumen of the blood into fibrine, which forms adhesions to the inner coat of the veins and thus obstructs the fine circulation of the fluid, and passing out of the vessels, produce oftentimes outside of the veins abnormal deposits; or hold it in solution when not yet deposited in the tissues.

The alkalies and salines dissolve fibrine after it has been deposited, or hold it in solution when not yet deposited, and both the alkali or saline and the fibrine will be excreted by the emunctories.

The acids so act upon the blood corpuscles and the albumen of the blood as to lead to an agglutination of the blood corpuscles, in continuous lines, or in masses of different forms and sizes; but the alkalies dissolve these agglutinations, and allow each separate blood-corpuscle to flow on in the current, unobstructed by its fellows.

It may be in this way in part, that acids act to diminish the activity of the circulation—and the alkalies act to increase the velocity of the circulation; but their difference in the electric scale must not be lost sight of, as having no small bearing on this matter.

Although acids are always present in the blood, still they should not be in excess; hence the necessity of alkalies to neutralize the acids, for there can be no excess of acids in the blood, and but a very slight excess of them in any of the secretions, without the presence of disease. Whenever there is a relative excess of acids, or a relative deficiency of alkalies, alkalies should be administered to supply the deficiency. The error, however, of supposing that any alkali which will neutralize the acid will answer, must not be fallen into; for the action and use of each differs from all the others, and *the* alkali should be administered which the system demands. There may be no relative excess of acids and no relative deficiency of alkalies in the aggregate, and still a marked deficiency of *some one* of the alkalies, which deficiency must be supplied to restore the patient to the equilibrium of health. To illustrate: A person may have a deficiency of lime, but an excess of soda in the system. In this case there would be no absolute excess of acids or deficiency of alkalies, and yet the patient would suffer until a sufficient amount of lime had been taken into the system to supply the want. The same fact might exist as regards potassa or any other of the alkalies; and although there might be present in the blood a large relative and absolute excess of alkalinity, still the deficiency of the one agent must be supplied to keep the patient in health. In these cases the alkalies act on the restorative principle. When used thus they are not excreted from the system.

As alkalies are more easily excreted from the system than acids, and as nearly all the excretions naturally contain some of the alkalies, it is absolutely necessary that this constant drain upon the alkalinity of the system be supplied by as constant an addition of alkalies to it, either in the nutriment or as medicine. The oxygen which is taken in with the respiration, and is absorbed through the skin, also demands a constant supply of the alkalies for its neutralization, and this addition of oxygen, together with the constant excretion of the alkalies, would indicate that perhaps no other class of medicines are so constantly demanded by the system to preserve its health, or to restore it from disease.

When the chemical, electrical, and physiological actions of alkalies in the system are fully understood by the profession, the importance of this class of agents will be far more highly appreciated than at the present time.

All the alkalies are solvents of the tissues, having a strong chemical affinity for albumen and fibrine as well as adipose matter, with which they unite, and dissolve, destroying the vitality and the structure of these tissues; but the *activity* of these agents differs materially, and their corrosive property is lessened in proportion to the amount of the acid with which they are in combination. Thus, the carbonates are less caustic than the simple oxide of the base, and the bicarbonates are less corrosive and destructive than the carbonates.

While the alkalies are all anti-acids, and solvents, as well as neutralizers of oxygen, they are naturally divisible into two distinct groups or Sub-Orders, and these natural differences must not be lost sight of by the therapeutist; as, otherwise they might be directed to be used in a very injudicious manner.

The one group may be styled the *Moist alkalies*, as their great affinity for water, leads them to abstract moisture from the atmosphere whenever they are exposed to its influence. To this Sub-Order belong potassa and its carbonates, neutral acetates, citrates, and tartrates; and ammonia, and its preparations. The crystals of these alkalies, if exposed to the atmosphere *deliquesce*, and the salts when not crystallized, become moist and semi-fluid.

The *Dry alkalies* include soda, lime, and magnesia, and their carbonates, neutral acetates, citrates, and tartrates. These, instead of abstracting water from surrounding substances, readily part with their water of crystallization, *effloresce*, and become a dry powder.

This marked difference in the physical and chemical properties of these two Sub-Orders, is not more manifest than the differences which obtain in their therapeutical powers. As what are called Lithic calculi are formed by the combination of lithic or uric acid, with some of the alkalies, more alkalies are demanded, to keep up an excess sufficient to prevent the acid from forming a solid combination with the basic earth. As the acids are useful to prevent, or to dissolve Phosphatic calculi, so the alkalies are useful to prevent, dissolve, and remove lithic deposits. The bi-carbonates will be found preferable to the more caustic preparations as a much larger amount of the alkali can be taken into the system without injury to the digestive apparatus, than could be taken of the caustic salts.

Those natural saline waters that have become celebrated for dissolving stone in the bladder, have been found to contain a large amount of some of the carbonates of alkalies. These alkalies act not only upon the deposits after they are formed, but also upon the acids in the blood, to neutralize them, and by preserving an equilibrium, prevent the formation of concretions.

It has been remarked that the stomach in health always secretes an acid which renders the healthy gastric juice slightly acid in its reactions. When this viscus is inflamed, its secretions are vitiated ed by the disease, and they become much more acid than natural; and the food not being acted upon by the healthy solvent, may undergo fermentation before it leaves the stomach, which fermentation generates more acids. In this class of cases, the excessive acidity must be neutralized by an alkali; and the healthy condition of the organ and its function may often be restored by an alkali alone.

Indigestion sometimes demands acids for its cure, and sometimes alkalies. Acids, when the stomach is torpid, inactive, or paralyzed, so that the normal amount of acid is not secreted by it;—and alkalies, when the organ is inflamed and the inflammation leads to an excessive secretion of a vitiated acid gastric juice; and also when the food undergoes a fermentation by which acids are generated in the transformation of the elements of the food.

The alkalies are used in gout, rheumatism, and other conditions where the disease is caused by or has produced an acid condition of the system. In all these cases the alkalies act as Restoratives, until enough has been retained in the system to bring it up to the normal standard of alkalinity, after which the excess is usually excreted by the kidneys, for all the alkalies are active diuretics.

In all the cases here referred to, alkalies act on a restorative plan. Their Cathoretic properties may receive a separate consideration, when their value as therapeutic agents in gout, rheumatism, scurvy, lithiasis, and other forms of disease, will properly be examined.

STILL-BORN CHILDREN.

BY C. HARLEY, M. D.

One of the most perplexing accidents a young practitioner meets with, is the apparent death of the child at birth. To discover the accident, and yet betray no doubt or hesitancy in adopting with promptness and perseverance, on the part of the accoucheur, the necessary measures for relief, always implies skill, and commands the confidence of the mother and her friends.

Apnœa will often be observed while pulsation can be detected, and should be carefully distinguished from asphyxia; as in the former case, the establishment of respiration is demanded; while in the latter, the functions of circulation are also involved.

The *causes* of apnœa are quite various, demanding different modes of management according to the various conditions present. When the child is too feeble to perform the muscular efforts of respiration, that feebleness may be inferred from previous loss of blood; producing a cold, pale, skin, relaxation of muscles, flaccid and pale lips, depression of the chin, and enfeebled pulsation at the funis. The child may make an effort at crying but fail for want of strength, and it will swoon and apparently die.

When the apnœa is caused by congestion of the brain, the countenance will be swollen, bloated, and purple, the body will be full and hot, and the limbs full but flaccid, while the pulsations of the umbilicus will be quite full and strong.

When the placenta has been separated from the womb before the birth of the child, as in placenta previa, and other accidents, the apnœa is almost always produced by anæmia: but the anæmia may also be produced by an obstruction to the free flow of blood through the cord from its being turned around the neck, or some other part of the child; or the cord may be pressed between the child's head and the bones of the pelvis so firmly as to put a check to the circulation, so as not to furnish enough blood to the infant to give it the requisite strength to breathe.

Whether the apnœa be caused by anæmia, or by congestion, as long as the faintest pulsation at the heart can be discovered there is some propability that the life of the child can be preserved. Even when the apnœa has been caused by long and firm pressure of the forceps upon the head and case seemed quite hopeless, children have been saved.

Children are exceedingly tenaceous of life, and where respiration *had not already taken place*, cases are recorded, of children remaining apparently dead, even hours, and yet resuscitated and revived. As long as the faintest signs of action of the heart can be detected by auscultation or otherwise, efforts must be perseveringly made to rouse the infant. Even if hours of time are thus consumed, as long as the heart continues to act, there is sufficient hope to demand continued effort. But when the heart ceases to pulsate because respiration has been suspended, the child is dead, and efforts are useless.

Treatment.—As soon as a child, is born the eyes and mouth should be carefully wiped clean with a napkin or other convenient cloth; and if there is no out-cry, the mouth and throat of the infant should be examined with the little finger of the attendant, and all mucus or other obstructions to breathing carefully removed. If the umbilical cord is coiled around the neck, that must be attended to; so also if it be in a knot, or wound around a part of the child, or there be any obstruction to the circulation through the cord, it must be relieved.

Respiration can often be excited by blowing with the mouth in the face of the child, exposing its face and surface to the atmosphere, dashing or spirting water or other fluid against the thorax, smartly slapping the back; and other manipulatory measures. It is quite customary for the attendant to fill his mouth with brandy, and spirt it forcibly against the thorax of the child.

One, or other, or several of the measures detailed, are usually sufficient to give voice to the new born child, even within a few minutes; but if they fail, two proper utensils for holding water sufficient for a bath should be obtained as soon as possible, in one of which there should be placed *warm* water, of a temperature of about 100° Fah., or about blood heat; and in the other *cold* water of about 55° or 60° Fah. The child should then be placed for a *moment only* in the warm bath, with the head and face properly elevated; and immediately immersed in the same manner in the cold bath. If the child does not then breathe or cry, it should be placed with its face downward and its thorax across the knees of the physician, while he makes gentle pressure upon its back to depress the chest, that when the pressure is removed air may pass into the lungs and thus establish breathing. As the pressure, which should not be continued but a few seconds, is removed, the child must be turned on its side. By repeating the alternations of pressure upon the back and turning upon the side, with simultaneous removal of pressure, a very fair artificial respiration will be established, and if life has not passed away, the vitality will become established. The warm bath must be but momentary. Continued warm baths, as was stated in the College Journal for May, produce very dangerous effects upon the lungs and heart.

Dr. Patterson of Michigan, has expressed great satisfaction at the results of a method of resusticating still-born children pursued by him for a year or two past. Dr. Sylvester of England, has also given publicity to a method quite similar to that of Dr. Patterson, which may be described as follows:

The physician holds the child with its face towards himself, each hand being placed under the arms, and grasping the thorax, with the thumbs over the shoulder. An attendant holds the head slightly inclined backward. The child is to be raised by lifting under the arms, with the hands loose, until the shoulders are well elevated, and the child is placed nearly upright. Immediately the infant is lowered to a sitting position, the shoulders depressed, and the thorax compressed.

These motions are continually repeated, with occasional suspensions to observe the results produced. During these manipulations, the body should be kept warm, the nostrils stimulated with inhalations of ammonia, cologne water, or alcohol, and other usual measures adopted, to facilitate respiration and increase vitality.

The above measures should be adoptod in case of apnœa of the child at birth, except when the want of inspiration is caused by apoplexy, but in those cases other measures must be pursued.

When the congestion is quite severe, it is sometimes desirable to sever the umbilical cord and allow some of the blood to drain away, but great care must be taken that not more than one or two teaspoonfuls escape before the ligature about the cord is tightened. After the congestion is thus relieved, the alternate hot and cold baths, and artificial respiration, as detailed, should be resorted to.

When the child is weakly, or anæmic, and the function of respiration is imperfectly established, those parts of the lungs farthest from thea trache, as the lower edges of the lobes of the lungs, are apt to remain undilated, unäerated, and solid. This condition may remain several days, or even cause death.

When portions of the lungs of an infant remain solid and not äerified, the patient has an appearance which indicates that death must shortly occur. Frequently it will appear discolored, and that discoloration may be mistaken for jaundice. The cry of the child is not natural, full, or clear, but a weak whimper. It seems to have difficulty of breathing while nursing, the respiration being imperfect, and the want of strength will not account for the entire difficulty. The surface is cold, and the circulation through the surface and extremities incomplete. The chest is not fully dilated during inspiration. After a few days, or even weeks, these various difficulties may increase, and the child die; or they may gradually disappear, the child become stronger, the dispnœa lessen, and health be fully established.

In those cases where the lungs do not readily and fully dilate, the child should be kept as quiet as possible, in a warm room, the surface should be gently bathed, with mild but oft repeated friction; a weak vapor of ammonia may be diffused through the moist atmosphere of the room, alternating with vapor of chlorine, of a strength adapted to the lungs of the patient; the necessary attention being paid to the diet and medicine of the mother and child, to ensure as much vigor of life as is possible to attain under the circumstances.

FISTULA IN ANO.

BY PROF. A. J. HOWE.

A fistula is a pipe or sinus in the tissues, which does not often heal without surgical interference. Certain parts of the body are subject to the disease, especially those about the anus; and when confined to these parts the difficulty is called *fistula in ano*, a term signifying a pipe *about* the anal orifice, though not necessarily communicating with the anus or the rectum.

When the pipe extends from an opening in the skin to a cœcal pouch somewhere in the tissues in the vicinity of the anus or rectal cavity, but not joining the bowel or having any communication with it, the disease takes the name of *external blind fistula;* if the preternatural passage commences in the mucous membrane of the bowel and terminates in the tissues, the skin in the progress of the disease not being reached, it is denominated *internal blind fistula*; and if there has been established a pipe leading from an opening in the skin to another in the lining membrane of the bowel, the difficulty is called *complete* anal fistula, the two other varieties being spoken of as *incomplete.*

Fistula is a common disease, especially among scrofulous subjects; the sedentary, too, seem to be troubled with it more than other classes, shoemakers and tailors often being victims. The latter suffer so frequently that they have, in London, formed a fistula society or club, the *fundamental* principles of which have never been divulged. Fistulous affections are far more frequent among men than women; the age most liable is between twenty and fifty, though the disease is occasionally met nearer the extremes of life. Fistulæ are not usually very troublesome or dangerous, yet fatal cases are sometimes reported. Louis XIV came near losing his life from the effects of a simple fistula, and the frequent abortive operations performed for its cure. In the majority of instances the disease is more disgusting, from the uncleanliness it necessarily produces, than painful, though almost every case will have its distressing periods. An individual having a fistula will enjoy respite from pain or uneasiness, and therefore indulge the hope that the disease is getting well. But these calm periods precede a tumult;—in a little while an aggravated "fit of fistula" is to be endured.

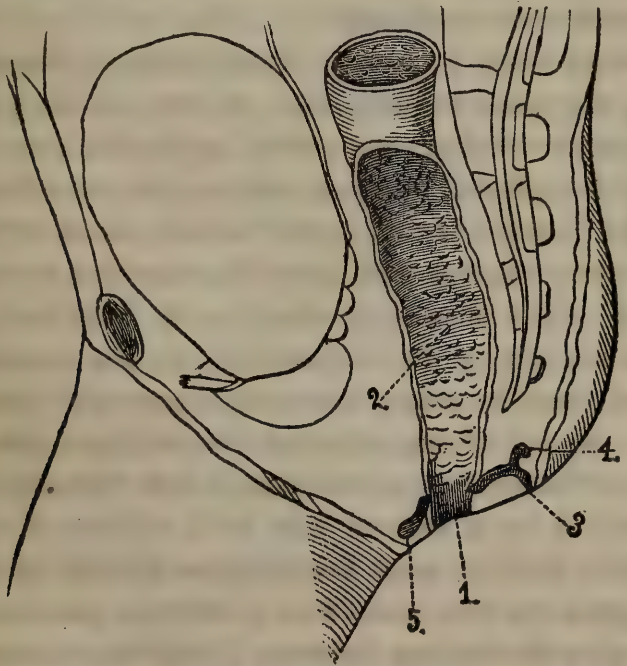
The early history of fistula is that of an abscess in the region of the anus, the symptoms, of course, being heat, pain, and swelling about the buttock or in the rectum. If the abscess be left to itself, after creating more or less suffering, it breaks, and discharges its contents, the patient experiencing much relief from evacuation of the pus. Now, it is well known that an abscess will point in the direction of least resistence, hence, in case one forms near the anus, it will open into the bowel, constituting the internal blind variety; or through the skin, laying the foundation for the external incomplete or blind fistula. Why the walls of an abscess near the anus will not unite, the cavity filling up as it does after a similar affection in any other part of the body, it is not easy to explain satisfactorily. It has been alleged that the repeated action of the sphincter muscles in passing feces and flatus, tends to obviate the healing process, yet who is satisfied that such is the only cause? Who has not known a fistula to begin in a phlegmon no larger than a pea, and extend itself gradually until a pipe, with walls as hard as cartilage, had pushed out in some direction for an inch or more? This statement may be safely made of a large proportion of all fistulæ about the anus. A little abscess, unimportant in itself, forms on the buttocks and breaks; and such is the nature of the disease, or the character of the tissues, that instead of the breach of continuity being filled by the ordinary reparative process, it will become tubular, burrow in the tissues, grow thick in its walls, discharge pus or a muco-purulent fluid, and, in fine, acquire all the characteristics of a mature fistula. The looseness of the tissues about the anus undoubtedly favors the formation of abscesses in this region, and the burrowing of sinuses. This view is supported by the fact that those patients who have tubercular matter deposited in the meshes of the lungs, also have it largely deposited in the loose structures of the buttocks. The foreign material provokes irritation, which results in inflammation and abscess. It is easier, therefore, to account for the frequency of abscess in these parts, than it is to understand the forces which determine that the abscess shall degenerate into fistulæ. It is probable, however, considering the organization of the tissues, that a deficiency of minute vessels in the parts has something to do with these morbid formations. The lymph furnished for the repair of the wound produced by the abscess, is not endowed with sufficient formative power to ensure its passage through the various grades of reparative developement, consequently it merely thickens the borders of the lesion, thereby preventing that collapse which ordinarily favors the union of wounds. The most difficult point about the pathology of this disease, is to understand why a fistulous pipe extends itself by burrowing in the tissues. Pus when collected in considerable quantites, will sometimes by the force of gravity, and the contraction of the tissues, follow the course of muscles, vessels, etc., *downwards*, but fistulæ will extend themselves in any direction. I know of no better manner of settling the question than by assuming that there is a principle inherent in the disease which determines the developement of sinuses. Quite frequently the fistula extends itself in the direction of the rectum, as if reaching that cavity was an end to be attained by the pathological forces. In other instances a fistula commencing in the skin near the anus, makes its way through the perineum to the urethra, as if reaching that cavity would satisfy the tendency to extension. After one fistula has matured so far as to reach from the skin to either of the canals just mentioned, another may commence in the adjacent structures, and travel in another direction, till it extends to the rectum, the urethra, or to some point along the course of the original sinuses. Fistula after fistula forms in this manner, branching on their way, until the structures about the anus are literally riddled with these preternatural passages.

The essential causes of fistulæ are constitutional and local; the former when a tuberculous taint or diathesis exist, favoring the deposit of unorganizable matter in the tissues of the buttocks, which eventually results in abscess; and the latter, when foreign bodies, as fragments of bones and other hard substances, that have been swallowed with the food produce inflmmation about the rectum. Hardened feces, injuries, and old pile tumors, occasionally initiate the disease.

Symptoms.—The early symptoms of a fistula in ano are ordinarily those of an abscess. An abscess having matured and broken it will continue to discharge so long that the patient suspects something wrong. Besides, he feels an itching about the anus, and a morbid sensibility which at times amounts to severe pain. He cannot sit comfortably nor evacuate the bowels and bladder without experiencing some uneasiness about the parts involved. In case the fistula becomes complete, extending from the skin to the rectum, flatus and small quantities of fecal matter will find their way through the false passage, and be discharged in connection with the purulent fluid secreted by the pipe. An internal blind fistula will produce many of the disagreeable sensations already enumerated, and furnish pus to the fecal matter as it is discharged. Besides the suffering from more or less of these symptoms, the patient has probably felt an unusual induration of the tissues in the region of greatest morbid sensibility.

To examine a fistula thoroughly is essential in establishing a correct diagnosis. Not unfrequently the orifice leading into the sinus is so small that it escapes the closest scrutiny. Ordinarily, however, there will be redness and swelling in the vicinity of the fistula, and its outlet will be bounded by a little raised, red papilla. By pressing upon the surrounding tissues a small quantity of purulent fluid may be squeezed from the sinus, which will aid in discovering the track to be followed by the probe. The direction of the induration is to be ascertained by manipulating the parts carefully. A small probe,—one much smaller than that usually found in the dressing case of instruments—is now to be passed along the fistulous canal, to explore its course, depth, branches, etc. The passage is often so sensitive that great care must be taken to avoid making the patient sink with pain. I have repeatedly seen the strongest men writhe and faint under the exploring operation. This, however, happens when the pipe is affected with acute inflammation; in chronic cases, the walls of the pipe being very callous, little or no pain is excited by the operation of probing.

In some instances the fistula is so tortuous that the probe will have to be bent at different angles in order to ensure its following the course of the canal;—and while pressing the probe along, very little force must be used, or the instrument will be carried through the walls of the pipe, and wander in the tissues to an indifinite extent, greatly perplexing the operator who may then seek in vain for the termination of the fistula. The probing process is not successfully completed until every point along the course of the pipe is examined with the probe, to ascertain if there be any branches; if any, there depth, direction etc. One great cause of failure to cure fistula has arisen from an imperfect examination of its ramifications.



This diagram represents a section of the body through the pelvic region, more than half of the structures being removed. No. 1, points to a small segment of the anal outlet; No. 2, to a section of the rectum, the folds of the mucous membrane being represented; No. 3, to the external orifice of a complete fistula in ano, its internal orifice being in the walls of the rectum; No. 4, to a branch having a cæcal extremity; No. 5, to an internal blind fistula, no communication with the skin being established. (Original.)

If a fistula like the one represented at figure 3, in the diagram, were treated by passing a knife or ligature through the main pipe to the rectum, the branch extending off, as represented at figure 4, would continue to secrete pus, which must have an outlet, rendering the operation unsuccessful. Let the exploration, then, be thorough, no branches being allowed to pass undiscovered. The inexperienced in such matters will be surprised at the depth and extent of some old fistulæ. If the probe be entered at an opening in the skin, it may be easily passed so that its point can be felt by carrying the finger through the anus. In withdrawing the instrument, exploring every point along the route, just before removing it entirely, another fistula may be discovered leading off in an opposite direction, to the extent of two inches. Fistulæ often diverge in this way, constituting a complete and a blind pipe. Internal blind fistulæ are generally rather difficult to explore; the opening into the bowel, however, is commonly only a short distance within the anus, which fortunate circumstance facilitates the exploring process. This variety of the disease usually is more troublesome to the patient than fistulæ which have an external opening. Flatus, the secretions of the rectum, or some liquid, or small portions of solid fæcal matter find their way into the cavity of the sinus, and keep up pain, irritation, and suppuration. The uneasiness thus created leads the patient to frequent attempts at evacuation of the bowels, though his efforts turn out to be ineffectual.

It is not always easy, in examining a fistula, to determine satisfactorily whether the pipe be complete or not. If the probe be passed through its external opening, and carried up by the side of the rectum, it may pass *by* the internal opening, and be felt—the finger being carried up into the bowel—through the delicate coats of the gut. The exploring instrument moves with great freedom, but no communication with the cavity of the rectum is discovered. Let the probe be now slowly withdrawn, trying the continuity of the mucous membrane nearer the anus, and in many instances a passage close to the anus will be found. In examining cadavers I have found the internal opening much nearer the anal apparatus than I was formerly led to believe. Not unfrequently I have noticed that both orifices of what might be called a complete fiistula, were *internal*, or existed in mucous membrane;—the upper opening seemed to commence just above the internal sphincter, the pipe descending between it and the mucous membrane, to the external sphincter, then taking a direction outwards between these circular muscles, and the columns of the longitudinal fleshy fibres, finally winding its way inwards after passing round the body of the outer sphincter, and perforating the lining of the anus at a point just above where that membrane joins the common integument. I have also seen a fistula take such an acute angle in its course that a probe could not be made to follow it until some part of the passage had been slit open. In some perplexing cases it is well to inject milk or some colored fluid into the external opening of a fistula, to ascertain if it find its way into the bowel; at other times a larger quantity may be injected into the rectum, to see if it will come out at any point. In either case, the experiment would be likely to determine whether the fistula be complete or not. I have been thus particular in calling attention to the many difficulties to be met in exploring fistulæ, for the benefit of those who are inexperienced in such matters.

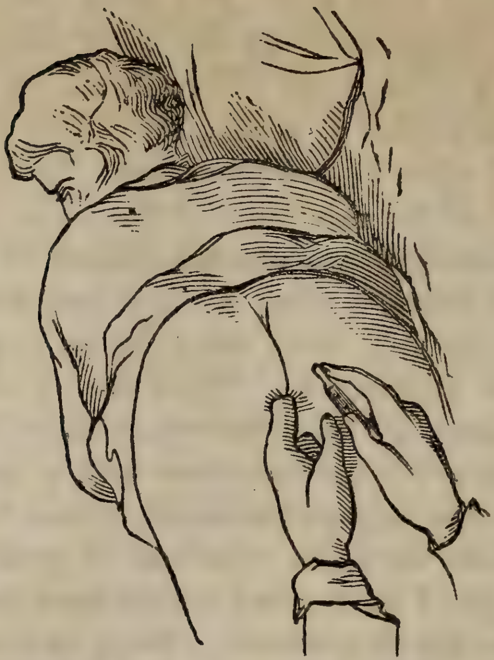
Treatment.—Before any method of treatment is undertaken, it must be considered whether the patient has a *serious* disease of the lungs. For, in a case of confirmed phthisis, to operate upon a fistula would be bad surgery. There are exceptions to this assertion, but they are by no means common. In case the pain and suppuration are unusually depressing, means should be instituted which promise relief. The objections to an operation in patients affected with pulmonary disease, as they have been presented, are: 1st. that the wound does not readily heal, and often reacts injuriously upon the entire organism; 2d. that in cases that the wound closes, the lung difficulty, though temporarily suspended, generally is in the end aggravated. These and other objections have been raised, and are not without weight. I have been led to regard them more lightly, having several times operated upon patients laboring with severe cough and expectoration. I have been gratified too, in nearly every instance, to find that the pectoral symptoms permanently subsided as soon as the operation was performed. I shall here, therefore, venture the opinion that lung diseases are occasionally initiated, and not unfrequently aggravated by a fistulous affection. The exhausting drain of a fistula, and the depressing effect of such a malady upon the mind, to say nothing of other influences, would contribute not a little towards awakening in the system the latent energies of phthisis. It is well known that hemorrhoids, hernia, and displacements of the uterus, will often produce a distressing cough in patients who had never been troubled with any difficulty in the thorax, before the pelvic viscera were deranged. These views in regard to the pathology of fistula are novel, yet they are respectfully submitted to the scrutiny of a watchful profession. I would not be understood in this connection as advocating operations upon patients in the advanced stages of phthisis, for such individuals cannot endure the shock consequent upon them; if the operation was successful so far as the fistula is concerned, no lasting benefit could be gained, and there are always those who would declare that the patient's death was hastened by the surgical interference. At one time M. Heurteloup, believing fistulæ beneficial to consumptives, at La Charite, practiced the operation of establishing an artificial fistula in tuberculous patients. It is needless to say, that this practice met with no success; yet there are those who entertain the idea that fistulous disease is advantageous to pulmonary patients, through the derivative action which it is supposed to exert.

When the fistulous disorder is purely local, or apparently so, some method of cure is to be adopted. The best plan in a given case may not be the one followed, for the caprices of a patient in private practice quite frequently have to be regarded. If a cutting operation be strenuously objected to, the passage of a ligature is the next best plan to pursue; this being opposed, cauterization seems to be the last resort. To be sure, the sinus may be irritated until its walls slough, by crowding tents into it, yet the process is attended with much trouble, and rarely results in a cure. Those surgeons who adopt the plan of treatment by using tents to dilate the passage, commonly proceed about as follows: They force small pledgets of lint, one after another, into the external opening of the fistula, allowing them to remain for a day or two, or until considerable uneasiness is produced by their presence. The little wads are then extracted one by one by means of delicate forceps. This part of the dressing being completed, the sinus is again filled as it was at first. In the course of a few weeks, the walls of the sinus will become quite thin, and the cavity large. Now, if the wound be washed with a caustic injection, it is possible that granulation may be established, which will result in a cure. On the contrary, however, the sinus is likely to collapse somewhat, then thicken in its walls, and finally assume the same general condition which characterized it before the treatment was commenced. Such is a history of the majority of cases treated by the *stuffing* or dilating method. It is the plan oftenest pursued by the timid, and by those who, to hold on to such unfortunate victims as happen to fall into their hands, tell "cock and bull" stories about the dangers and uncertainties of operative measures.

The method of treatment by caustics has better claims, though it is often a tedious way to get rid of the simplest form of the disease. I have known a physician to syringe a fistula every day or two with a solution of potassa, for six months, not curing it then, that in all probability could be cured in a week with the knife, and not lay the patient up for an hour. A good way to cauterize a fistula is to use a wooden probe that has been dipped in nitric acid. The probe should be made of hickory or some other tough wood, its size being adapted to that of the canal in which it is to be used. The acid should be of commercial strength. For certain blind or uncomplete fistulæ I prefer this plan of cauterization to any other kind of treatment. By bending the probe it can be made to follow the sinuosities of the pipe. The caustic can be used, too, at full strength, without the danger of its spreading over healthy tissue, as it would be likely to, do if used with a syringe. The caustic probe may be used every other day as long as there is an indication for caustic applications. When the opening of an internal blind fistula is situated high up in the rectum, the orifice may be brought into view by using a tubular speculum with a fenestra in its side. The probe, bent to the appropriate angle, is then to be wetted in the acid and pressed into the sinus, reaching its pouch-like extremity if possible. In this way I have cured fistulæ that would require pretty severe operative means to overcome. Every one acquainted with the effect of nitric acid upon the shining callous borders of an old ulcer, will readily appreciate its action upon the walls of a fistula.

The method of treatment by means of a ligature is very simple. It consists in arming a curved needle,—the curvature being adapted to the particular operation at hand—with a firm silk ligature—a couple of strands of saddler's silk well twisted together will do—and passing it along the fistulous track to the cavity of the bowel, if the fistula be complete, or, if incomplete, to the bottom of the sinus, then through the tissues, by the nearest way out. The ligature is drawn into place, and there left, its ends being tied together, until it ulcerates out as a seton often is allowed to do. The tissues granulate and fill the track as fast as the ligature finds its way along out. The ulcerative process may be greatly hastened by passing the ends of the ligature through two of the holes in a common flat button, and tying them snugly in a bow knot. Every two or three days the knot is to be tightened. Metallic ligatures have been used, but they are not so good as silk or hemp. This process has been highly extolled, yet it is tedious and uncleanly. Besides, the little groove or wound left just as the ligature comes away, will, in scrofulous patients, generally degenerate into another fistula, instead of healing. Acid cauterizations, however, will often prevent this. The ligature, however, has this in its favor ;—the patient need not be confined to his room a day with it.

The last plan I have to mention at this time, and in the majority of cases the most rapid and uniformly successful, is that of incision. This



This diagram represents the patient in a prone position with the pelvis elevated ; and the surgeon in the act of laying open a fistula, the forefinger of the left hand being introduced through the anus, and the blade of a bistoury carried along the pipe until it joins the end of the finger in the rectum. (Original.)

is performed, the patient being prepared by previously evacuating the bowels, and placed under the influence of an anæsthetic, in the following way: The forefinger of the surgeon's left hand is inserted in the rectum to the extent of the internal opening of the fistula, then a probe pointed bistoury is carried through the external orifice and along the fistulous canal to the cavity of the rectum, where it meets the finger; all the tissues between the edge of the knife and the finger, which often include both sphincters, are to be divided by withdrawing with a sawing motion the finger and the bistoury, the two being held together firmly. The hemorrhage at first is considerable, especially if the fistula extends to much depth. The bleeding, however, by the retraction and contraction of the divided vessels, usually ceases in a few minutes; if not, the surfaces of the wound may be wet with the per-chloride of iron, the styptic effect of which is soon sufficient for all bleeding that may result from such an operation. If the fistula be not complete, but extend towards the rectum, the same operation may be performed, a sharp pointed bistoury being used to transfix the tissues which lie between the cœcal extremity of the fistula and the finger, if it be of the *external* blind variety,—and between the skin and the pouch of the sinus, if it be an *internal* blind pipe,—when this instrument may give place to one with a probe point, with which to finish the operation, that the finger may not be cut. In place of the finger in the rectum as a rest or *point d'appui*, a grooved wooden gorget the size of the finger may be employed. The point of the knife after reaching the cavity of the bowel, is lodged in the groove of the gorget, where it rests until the fistula and bowel are made into one chasm.

After the fistula is laid open in the manner just described, the bottom of the wound is to be examined to see that no branches remain uncut. If any be found, they are to be laid open with the bistoury, or cauterized to ensure a sloughing of their walls, and a cure. It is well in most cases after the first incision is made, to turn the edge of the knife against the deep indurated portion of the fistula, and scarify it, to make sure of its destruction. Following the use of the knife I often apply caustic to the bottom of the wound, or that part of it occupied by the fistula. This precaution is necessary to escape an occasional failure.

The dressing consists in keeping the patient quiet, and his bowels confined, until a union of the wound has occurred. I place no lint in the wound to prevent the outer portion of it from uniting before the deeper parts do. If the bowels be kept soluble as is generally recommended, there is danger that the walls of the incision may, from the frequent passage over them of feculent matter in a fluid state, become smooth and indurated, or so degenerated from a simple wound, as to obviate the healing process. It is from this cause I apprehend that most of the cases of non-union of the wound have occurred, leaving the anus without a sphincter. Let the bowels, then, be locked for five or six days, by administering to the patient small, but repeated doses of opium. After it is observed that the tissues have become pretty firm by the reparative process, the bowels may be moved by the use of enemas and laxative medicines. Straining in attempts at evacuation might tear open the recent wound.

When a patient has two, three, or more fistulæ, all of them can generaly be treated at the same time. If a pipe extend for some distance just beneath the skin, it may simply be slit open upon a grooved director. I have dissected out a very indurated fistula, when it did not extend any where near the anus; and believe in such cases it is a good plan. Do the best we can, in some instances, new fistulæ will form as fast as they can be cured. A taint is in the system, which must be removed if possible by the exhibition of cod liver oil, iodine, and other well known alteratives. In case a patient has had a fistula and been cured of it, and there is evidence of scrofula in the system, the buttocks in the region of the anus should be occasionally smeared with the compound iodine ointment, as a prophylactic. Means should also be instituted to invigorate the body. Unimpaired health is a safe-guard against a subsequent attack of the disease. Constipation, by obstructing the circulation in the rectum and the adjacent parts, thereby favoring the formation of small abscesses, which are the precursors of fistulæ, should be positively avoided.

TREATMEMT FOR TINEA CAPITIS.—SCALD HEAD.

BY J. ANDREWS, M. D.

It is needless to assert that tinea capitis, or "Scald Head," is a very rebellious affection. Every physician is aware of the fact. Not that the disease is ever regarded as incurable; but ordinary plans of treatment fail to cure the disease rapidly and permanently. I formerly used ointments that contained sulphur, or iodine, or lead, but they produced few satisfactory results. Latterly I used more or less of the vegetable ointments so highly recommended for the treatment of the disease, in books of a *Reformatory* character, yet was not satisfied with the amount of good seemingly effected. A year and a half ago I saw an article in the College Journal, on the Treatment of Scald Head, which was written by Dr. Allen, highly commending the "Black Plaster or Healing Salve" of Dr. Beach (?). Upon his recommendation of the remedy, I resorted to it *again*, for I had used it before for the same purpose, and always with marked benefit. In the second trial I found it sustained its reputation pretty well. In one case, however, it seemed to benefit the patient for a few weeks, then the disease obstinately remained *in statu quo.* I then resorted to experimenting, trying the local application of cod-liver oil, alone and combined with alkalies; but found that glycerine, tar, and the nitrate of potassa, produced the best effect, the scalp assuming a better condition in a few days after the mixture was applied, and continued to improve until it was well. I have tried it in other cases, and always with uniform success. The proportions adopted by me, are as follows:

℞. Glycerine, f℥ij.
Tar, fʒij.
Nitrate of potassa, grs. x. M.

Without further remarks at this time I respectfully submit *the compound* to the readers of the Journal, hoping it will prove as useful in the practice of others, as it has in mine.

EDITORIAL DEPARTMENT.

ILLIBERALITY.

One of the most commendable characteristics ever manifested in individuals or classes of men, and one which is always readily perceived and appreciated by even those ordinarily not actually observant, is *Liberality*, of that generous, noble, self-reliant character, which while its possessor is free, bold, and fearless in investigation, and clear and distinct and firm in entertaining the opinions and conclusions arrived at, and ready on all proper occasions to enunciate those conclusions, is also ready and willing to allow to others the privilege of acting on the opinions to which they have arrived.

In our own chosen profession, there have ever appeared, prominent above the mass, those who have been eminent for their ready and generous liberality toward others who did not entirely agree with them. Doubtless, among the best and brightest of the human race, in all time past, have been the noble and liberal in our profession; and the more enlightened of other callings have been eager to acknowledge the patent fact. But we are pained to be obliged to acknowledge that *all* in the profession have not at all times manifested high and noble traits of character. Instances of illiberality and meanness, have in reality been quite too common.

As one crime will arouse the minds of many people to active feelings of indignation, while many noble deeds may never be heard of beyond the narrowest limits of unostentatious benevolence: so the instances of foolish illiberality on the part of a few unworthy members of the profession have tarnished the reputation of the whole class.

Many instances could be cited of the injury suffered in reputation by the many, from the acts of thoughtlessness or meanness on the part of a few, and those aside from their unenviable notoriety, quite insignificant.

But, unfortunately, there are instances where entire bodies, or societies of physicians, have been betrayed into acts which can in no way be approved, or even excused. A recent case has elicited remarks, and particularly in the secular papers of New-England, by no means favorable to the profession, and if reports be true, far from honorable or commendable.

The Editor of the Springfield Republican, himself a physician, says:

"Dr. J. S. Curtis, of Hartford, was called to a sick person whose regular physician was a homœopath. Dr. Curtis went and gave his advice, and did not insist, as a preliminary condition of his going, upon the dismissal of the family physician. We do not know but he recognized that physician as somebody, and took counsel with him. He did not stand upon the order of his going, but went at once, anxious like a good physician, to relieve human suffering at every opportunity. For this offense he was expelled from the Hartford County Medical Society, and the case being taken before the State Medical Society at Middletown last week, the expulsion received the approval of the congregated physicians of the state. Dr. Curtis was not allowed to relate the circumstances of the case or to make any defence, but was condemned without a hearing.

"He has since published his defence, and to all the world outside of the medical faculty it must appear very reasonable and conclusive. Indeed it is not easy for outsiders to conceive how it should be necessary for a physician to make any defence at all for doing what Dr. Curtis did, but, on the contrary, the people will naturally think that the defence would have been altogether more necessary if he had refused to visit the sufferer to whom he was called. It appears that there is a rule or a mutual understanding among the allopaths that they will not go into consultation with irregular practitioners of any sort, or visit patients who are under their care. There is a reason for this to a certain extent, as the various systems of medicine do not mix well together, and an allopath cannot be expected to become responsible for a case which may be daily interfered with by another physician.

"But this is a matter that should be left wholly to the discretion of individual physicians, and it would seem that the doctors might trust each other in some degree of personal independence in these things, without deeming it necessary to establish a medical inquisition and to taboo every member who does not conform to an arbitrary rule. While the Hartford county doctors were discussing Dr. Curtis's offence, Dr. Beresford declared that 'if patients in extremity refuse to dismiss their homœopathic physician, and we have every reason to believe we could save life by rendering our assistance, which would otherwise be lost, we are to refuse that assistance.' Dr. Curtis may well ask how far short of homicide such action stops. Dr. Curtis declares himself unwilling to believe that any considerable portion of the profession is willing to stand on this ground, yet it is evidently the ground upon which both the County and State societies have expelled and endeavored to disgrace him. Dr. Curtis says in his defence:—

'It is unjust and inhuman to compel the suffering and enfeebled to submit to these extreme terms, especially at a time when they are the least able to do so. It has been urged that the course which I have pursued countenances and supports an error. I do not see how. Whenever I am sent for, it is as a practitioner of the old school, I go as such, give an opinion as such, and if I were to prescribe I should prescribe as such. There are circumstances under which I would visit a patient who was under the charge of the most ignorant charlatan in the world. I would not treat the charlatan as my equal, but I would treat his victim as a human being, and relieve his suffering and prolong his life if in my power. If he still chose to lean upon his impotent friend, he would have the right to do so.'

"This is good common sense and common humanity, and if the doctors have rules that make such acts unlawful in their associations, the sooner they repeal those rules the better for the dignity and credit of the profession. The medical faculty have heretofore taken pride in their superior liberality as a profession, but it is really some years since the theological doctors indulged in any exclusiveness that can be paralleled with this. Dr. Curtis shows that while the homœopaths with whom he held consultation are regularly educated physicians, his allopathic associates in Hartford who condemned him, do themselves fraternize with a practitioner who has no medical education at all, but is an out-and-out quack, and that they also universally violate their standing rule against the use of patent medicines. The doctors must really be a little more liberal and magnanimous among themselves. Most of us are willing to go it blind in swallowing their prescriptions, because we cannot very well do otherwise. But it is rather essential to our peace of mind that we should do this with a certain amount of confidence in their superior wisdom. We beg of them, therefore, not to undermine this needful faith by proscription of each other, and assumptions of infallibility, such as superior wisdom never makes. There will be no satisfaction in being sick if the doctors subvert our confidence and respect for the profession. It needs some little faith to make even a sugar coated pill go down easily, and we protest we cannot stand the 'heroic treatment' at all, unless we can hold on to our primitive confidence in the regular faculty."

Dr. Wm. Elder, of Philadelphia, one of the purest men the world ever saw, and with talents far superior to the majority of physicians, some years since, commenced the publication of the Philadelphia Lancet; but his liberality and humanity was not congenial to some of the restless and intriguing spirits too often to be found in the profession in large cities; and rather than lead a life of contention, he allowed his Journal to pass away, and associated himself with those who could perceive and appreciate his talent and humane character.

Last year, the usefulness and character of the American Medical Association, was greatly injured, by their refusing to listen to the Reports of Committees at their Annual Convention, and squandering their time in endeavoring to *crush out* one eminent in the profession in Philadelphia, who had nobly forgiven an erring brother, not seventy and-seven times as he is commanded to do, but once only.

The Bastile has been destroyed and he was not put to physical torture, but his mental sufferings appeared to afford unusual delight to those who constitute themselves, accusers, jurors, judges, and executioners.

Another from New York, also shared a similar fate for participating in the noble and humane deed, but this solitary act of kindness on the part of persons even in a quarrel materially excited suspicion, and perhaps the punishment was merited; yet the *act* of punishment must even be looked upon as illiberal, mean, cowardly, and unworthy the lowest in the scale of humanity.

The profession are also conversant with the history of Dr. J. V. C. Smith, for a very long time Editor of the Boston Medical and Surgical Journal. He dared to live out his convictions of liberality and humanity, and the profession have *not* sustained him.

We know that although the restless, ambitious, and bigoted, continue to make themselves quite conspicuous,— feared by some in the profession, and despised by all out of it—the mass of physicians are *not* illiberal, mean, and despicable.

One year since the College Journal took occasion to enumerate a few instances in the world's history, of the noble position which physicians have maintained in the estimation of the wisest and the best of the race. Now we choose to add, that the acts of illiberality and meanness of a few, should not be, and are not, chargeable upon the profession as such. Even of those who have *appeared* to acquiesce in acts like those here referred to, *we* are in the position to know that words and acts of dissent and condemnation, loud and firm, would take the place of silence and apparent inactivity, did physicians know each other's thoughts and feelings as *our* position enables us to know them.

The wisest, highest, and best in the land have and do condemn such acts, and are hoping for an opportunity to speak and act their condemnation, perhaps in a manner which will astonish a few would-be-great *little men*, who at present continue to make themselves disagreeable to the rest of the profession, and a reproach before the whole world.

BOOK NOTICES.

The Household Physician; for the use of Families, Planters, Seamen, and Travelers. Being a brief description, in plain language, of all the Diseases of Men, Women, and Children, with the newest and most approved methods of Curing them. By IRA WARREN, A. M., M. D. Fellow of the Massachusetts Medical Society, etc. Illustrated by Thirty-six figures and eight splendid colored Lithograph plates, and Two-Hundred and Thirty-six Engravings. Boston; Higgens, Bradley and Dayton, 1859.

THIS is the long title-page of a large and well-printed work, written by an author well and favorably known in the New England States. In his Preface, he says, what the Title-page also indicates, that the book was "written for the million." And as a justification for its publication (*excuse* he neither needs, nor offers,) he says: "Every man's physical organization is *his own*, and he is charged with the responsibility of taking charge of it. To do this properly, he needs knowledge of it; and to with-hold this from him, *is another form of the old oppression*, which decreed knowledge and power to the few, and ignorance and obedience to the many."

In his General Introductory Remarks, he speaks of various classes of physicians; of Eclectics, he says:—"They drew" (in 1852) "from the Committee on Indigenous Medical Botany, appointed by the American Medical Association, the confession that our practitioners generally, have been externally ignorant of the medicinal plants even in their own neighborhoods; and to this fact the Committee attributed it, that the Eclectic physicians had in so many instances supplanted the 'regulars' in the confidence of the people.

"The education and talents of this Class of practitioners have gradually risen, year by year, until they have several medical schools, where students are well instructed in the principles of medicine, by men of real ability. This is particularly true of the College at Cincinnati. They have also a literature of no mean significance, especially in the department of Materia Medica. * * * And yet, it is mortifying that the remedies which these men have given us, are, by hundreds of our old school practitioners, not even known by name, and where known, generally not honored with a trial.

"King's American Dispensatory, a book of 1300 (1475) pages, in which they are well described, is almost unknown among us. Aside from the copy in my own library, I do not *know* that one is owned by any member of the Massachussetts Medical Society in Boston. I consider this a disgrace, for however learned a man is, he is not fully equipped as a practitioner, until he is acquainted with this class of Medicines."

In many portions of his Book, Dr. Warren furnishes evidence of having obtained many of his most cherished ideas from the writings of the Eclectics; and, also, that he is governed by a fearless, independent determination to think and act for himself as the *true man and physician* should and will.

We have not space at command to particularize at the present time, but will remark briefly that the work is well written, admirably illustrated, and printed on fine paper. We fear, however, that the Publishers will find that it will not command a remunerative sale.

Lectures on Metaphysics. By Sir WILLIAM HAMILTON, Bart. Professor of Logic and Metaphysics in the University of Edinburgh. Edited by the Rev. Henry Longueville Mansel, B. D., Oxford, and John Veitch, M. A., Edinburgh. Boston, Gould and Lincolin, Cincinnati: George S. Blanchard, 1859.

MORE than twenty years since, Sir William Hamilton, was elected to the Professorship of Logic and Metaphysics in the University of Edinburgh; and immediately commenced preparation for delivering a course of lectures on the subject of his Professorship. But to acquaint himself with the opinions of others, and their reasons for entertaining them, demanded no small amount of reading and research, so that he was obliged to commence the Course of Lectures, before he had written what he was to deliver.

The usage was, to deliver three lectures a week, on alternate days, and most of the lectures were written the day or evening before delivery, which will in part account for their being somewhat disconnected, and their not covering the entire ground, or province of metaphysics. In fact the subject of Ontology, or Metaphysics proper, is scarcely considered, and never except incidentally, while Connation, and Feeling, have more attention bestowed upon them, and the Cognative Faculties are quite fully discussed.

But, incomplete as these Lectures always appeared to their author, those who were fortunate enough to listen to them, appreciated them and esteemed them more highly than any which had been delivered in Great Britain, and gave an impetus to the study of Philosophy and Metaphysics greater than any thing which had been written or spoken in the English tongue.

Cousin in France, and Schelling, and Helgel, and Oken, and Kant, in Germany, as well as Bishops Whately and Hume, in England, and Emerson in America, have each impressed individual minds, in England and America, quite as strongly as Hamilton, but none of them have exerted as wide an influence, as has been exerted by the delivery of these lectures in the University of Edinburgh during the twenty years they were pronounced. And no work has proved so attractive to all classes of readers.

Although they were first delivered immediately after they were written, they were elaborated and improved year by year, and as now Edited they will be read with great pleasure, and profit by all who feel an interest in the subjects considered.

Practitioners of Medicine are often too closely confined by the routine of their daily duties, to pay much attention to purely philosophical discussions; but in this volume they will find some papers on physiological subjects, being extracts from the author's lectures on Phrenology, and communications made by him to various Medical publications.

As a comparison to *Cousin's Philosophy*, and the valuable little volume by Judge Stallo of this city on the *General Principles of the Philosophy of Nature*, it will be found of extreme interest and value.

The Life of North American Insects. By Jaeger, late Professor of Zoology and Botany in the College of New Jersey, etc. With numerous Illustrations. New York: Harper & Brothers. From Robert Clarke & Co, Cincinnati.

Although of late years the study of insect life has occupied the attention of numerous individuals, there has, unfortunately, been no work especially devoted to the insects of this country to aid the student in his investigations. True, information relative thereto can be found distributed among a few voluminous and expensive volumes, but these are rare and beyond the reach of most persons, and are therefore, rather impediments in the way of general progress in this department of science. The volume before us is devoted to a description of the insects of North America, both the diurnal and nocturnal ones, including their modes of propagation, feeding, habits, etc., and is well illustrated with fine wood-cuts, filling up a gap in this branch of Natural Science, that has been allowed to remain for too long a period.

Insects are found almost every where, in the atmosphere, on plants, on animals, in the ground, etc.; some are of great service to man, while others prove exceedingly baneful, hence, an investigation of their peculiar conditions is one of much importance. Prof. Jaeger's work enters into this subject in a pleasing and popular style that cannot fail to interest and instruct the general as well as the scientific reader. The price of the work brings it within the reach of every one who desires to engage in this fascinating study; and in this city it is for sale by our enterprising fellow-citizens, Robert Clarke & Co.

First Book on Physiology. For the use of Schools and Families, intended as an introduction to the larger work by the same author. By WORTHINGTON HOOKER, M. D., etc. Illustrated by Engravings, New York : Pratt, Oakley & Co., 1857.

Human Physiology ; designed for Colleges and the higher classes in Schools, and for general Reading. By WORTHINGTON HOOKER, M. D., etc. New York : Pratt, Oakley & Co. 1859.

IN January 1857, the COLLEGE JOURNAL contained a notice of the smaller of these two works of Prof. Hooker, and as the book has remained unchanged, we refer our readers to the opinions therein expressed as to the character and the value of this production.

The larger volume has been received with marked favor by the press ; but on examination of the work we are impressed with the idea that this favor was bestowed, rather upon the well-known reputation of the author and the importance of the science, than from any thorough examination which had revealed valuable characteristics in the work itself. We are sorry to be obliged to say, that it *does not* appear always to be correct in its statements ; not happy in its mode of presenting what its talented author has concluded are facts in physiology. The new *date*, which the publishers have given to their old work, will render many suspicious of the accuracy of other parts of the Book.

We have continuously expressed our opinion of accurate physiological and hygienic information, and with pleasure will do all in our power to aid in its universal dissemination.

On Poisons in relation to Medical Jurisprudence and Medicine By ALFRED SWAINE TAYLOR, M. D., etc., etc. Second American, from the Second and Revised London Edition ; Philadelphia ; Blanchard and Lea, 1859. Through Robert Clarke & Co., Cincinnati.

Taylor on Poisons, a reprint of which has been very extensively circulated in America, has a reputation probably superior to all other works of a similar character in the English language. The present edition includes the consideration of those subjects only, which may give rise to medico-legal enquiries, to the exclusion of such as are only historical. As a consideration of the *poison* department of Medical Jurisprudence, the present arrangement has enabled the author to present us a work of extreme utility and value.

In his Preface, the author says: "No one can draw a definite boundary between a *poison*, and a *medicine*," and, hence, in including the consideration of substances in this edition, or excluding them from it, it is not to be inferred that he expresses any opinion in regard to their medicinal or poisonous character *per se*, but simply has he seen fit to confine his remarks to those substances which have been made the subject of legal investigations.

Hints toward Physical Perfection; or the Philosophy of Human Beauty; showing how to acquire and retain Bodily Symetry, Health and Vigor: secure Long Life, and avoid the infirmities and deformities of Age. By D. H. Jaques. New York, Fowler & Wells, 1859.

In this are presented some valuable facts *for the people*, and equally as valuable for the profession; written in a pleasing style, and as is the custom now-a-days, quite profusely illustrated. We have always been pleased with that valuable work "*Walker on Beauty*," but think it not as good, in the form of disjointed extracts, as here presented, as in the *original* English edition.

But, in addition to the quotations and ideas taken from Walker's more scientific, artistic, and elaborate work, there are some hints of no small value, especially on hygiene, rest, and exercise. The book will secure a sale and command attention.

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The Virginia Springs, and Springs of the South and West. By J. J. Moorman, M. D. Resident Physician at the White Sulphur Springs. With Maps and Plates. Philadelphia: J. B. Lippencott & Co., 1859.

Some twenty years since Dr. Moorman published a pamphlet in regard to the White Sulphur Springs of Virginia, and the use of the waters. During the intervening years he has assiduously devoted himself to the effort of bringing those waters into the notice and use of the public. In the edition there is presented a mass of information, valuable for those who desire to make use of the waters of the so-called Mineral Springs, which will make it *the* Hand-Book for their guidance. For that purpose, and as a resume of what is known upon this interesting subject, it will be found quite satisfactory.

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PERIODICALS.

The British and Foreign Medico-Chirurgical Review, for April, is of more than usual value. We are gratified to observe increased attention to matters of *popular* interest.

The Dental Register of the West, for June, is fearless and bold, and evinces great industry and talent on the part of its Editors. A new volume will commence in July, when it will be issued *Monthly* without any additional charge.

Every *physician* should read at least one good Dental periodical, and we think none of more practical utility than the Register, is published in America.

MISCELLANY.

CONFECTIO PIPERIS.

Under this head the older Dispensatories mention a preparation which was compounded as a substitute for "Ward's paste," a remedy that acquired some reputation abroad for curing fistula in ano, and hemorrhoids. One of the formulas for the confection, is as follows:

℞. Pul. piperis nigri,
" glycyrrhizæ, āā ʒss.
Olei fœniculi, (Fennel oil) fʒss.
Mellis, ʒij.

The powders are to be well mixed, then the honey and oil added, and beat into a conserve. A dose is a lump the size of a filbert, which may be repeated two or three times a day. Sir Benjamin Brodie, in his *Clinical Lectures on Surgery*, speaks of the confection thus: "The medicine which we now call confectio piperis nigri was originally a quack medicine known by the name of Ward's Paste. It is composed chiefly of black pepper and elecampane, and it had the reputation of curing fistula. I believe it sometimes did so. It is very useful in the case of piles, and where there is an ulcer of the rectum unconnected with fistula. The black pepper mixes with the fæces, it passes down the canal, and becomes a stimulant to the mucous membrane. In this point of view it is useful to persons that suffer from disease of the mucous membrane after dysentery, or who have disease of the rectum. As it will cure piles and an ulcer of the rectum, so no doubt it will sometimes cure fistula."

Mr. Brodie has given the imitated quack medicine as high praise as any *pepper* mixture deserves, yet a combination of cayenne, one part, black root, and sulphur, three parts each, and honey enough to make an ordinary confection, is a more valuable remedy in the treatment of the difficulties to which he refers.

THE ST. JOSEPH (MO.) JOURNAL OF MEDICINE AND SURGERY.

This Journal for May, in its leading editorial, discoursed of our Monthly as follows:—

"The College Journal of Medical Science.—We have before us a number of this journal, published by the Faculty of the Eclectic College of Medicine, Cincinnati. It contains sixty-four pages, which are published monthly at one dollar per annum. Its articles are generally well written, some of them bearing the evidence of deep thought and research, and while we admire this, we detest its assumptions. It assumes to call the regular profession of Medicine 'Allopathy,' while it robes its own feeble prejudiced party in the mantle of Eclecticism."

We thank the St. Joseph Journal for the good it has said of us; and we are not displeased with the manner in which it has expressed its disgust at certain "self-robed Eclectics." That class of physicians has been rapidly increasing for the last ten years. The causes of this increase have been various; the most fruitful being the significance of the term, and the success and popularity of those who have done most to establish and elevate this novel method of medical practice.

Undoubtedly, many who have assumed the eclectic title could offer little proof that they were fit to take upon themselves the individuality implied in the term. But in their zeal to manifest their liberal inclinations, they have linked themselves to those who are truly independant. How could this be avoided? Can a magnanimous community refuse accessions simply because those who offer themselves are not at the time every way qualified for membership? The American Union has been receiving by emigration large accessions from Europe and other countries; the new comers claim the right of citizenship and other privileges;—but they are unacquainted with the leading principles of our Republic. Have they, then, no right to style themselves *freemen*, becoming truly such as far as their circumstances will permit?

We are not a little surprised that a journal "devoted to the *advancement* of practical Medicine and Surgery" should dare to tell its intelligent readers, that Mercury and Blood-letting are therapeutic means which "to the present date are held in the highest esteem by the *whole* regular Medical world." If you mean what you say, Messrs. Editors, you must place among the "irregulars," men of whom you and your fraternity have long been proud. Do you wish us to mention names?

You say, that "every wise and judicious physician is an eclectic." Others often have said the same. Allow us to remark in turn, that every "regular" physician is not an Eclectic. Many of the most liberal of these, however, have so far disrobed themselves of prejudice, as to engage in active search after therapeutic means which are more certain, and less dangerous, than blood-letting or mercury. Long ago they lost faith in those agents, and have contributed not a little toward propagating doctrines you censure us for supporting.

It seems to displease you most that we have used so expressive an appellation to designate our College; and you insinuate that there has been some theft in obtaining it. "Not so fast, Mr. Journal." We are not aware of appropriating a term already in use by any other College. On the contrary, certain Journalists professing "regularity" have coveted the term Eclectic to a degree that weakens moral obligation.

Lastly, the Saint Joseph Medical editors in welcoming the "*Cincinnati Lancet and Observer*" to their table, express the following desire; "We hope to *observe* the 'Lancet' bleed these hybrids ad deliquium." Setting aside the attempt at a witticism, the paragraph is weak as the hope is faint. The "Lancet" referred to, makes a bloody appearance, yet it does not even frighten children of a hemorrhagic diathesis.

RITTER'S TRUSSES.

Mr. Ritter, of the firm of Ritter and Rex, Truss makers, etc., of Philadelphia, placed on the table of one of our editors a very fine specimen truss. At present much is being done to improve all kinds of surgical apparatus, and few have succeeded better in the way of surgical bandages, than Ritter and Rex. Their truss is pronounced by those who have worn several kinds, to be the most *tolerable* of any. With the pressure of a few ounces it will retain every ordinary hernia, and effect a permanent cure in curable cases. The chief merit of the instrument we conceive to be in its certainty of retention, and in the ease with which it is worn.

Physicians often write us, asking our opinion of this, that, or the other truss which is being hawked through the country. Nor is it strange that such inquiries should be made, considering that almost every hernial bandage possesses some qualities to recommend it. In penning this item, therefore, we do not intend to be understood as pronouncing Ritter's Truss the only style fit to be used. Other patterns have desireable qualities; and, doubtless, the genius of some inventive individual will hereafter contribute to the instrument still other qualities which shall at least approximate perfection.

OBITUARY.

E. Morgan Parritt, M. D., for several years one of the Faculty of the Worcester Medical Institution, died in Richmond, Me., April 3rd, aged 42 years. Dr. Parritt long occupied a prominent position in the profession, his talents being of that ready order, which enabled him to express his views—always of a highly philosophical character—in a very clear manner, and seemingly without that tedious preparation necessary to some men before they can present their ideas satisfactorily. Consequently, in the discussion of topics on which medical men differ, he exhibited himself to the very best advantage. As a lecturer he was exceedingly interesting and popular, as those who once listened to him will unanimously testify. His death has bereaved an extensive circle of enthusiastic admirers and warm friends.

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ORIGINAL CONTRIBUTIONS.

AMBER.

BY JULIUS MAETKE, M. D.

Amongst the few medicaments which have been in use from time immemorial, and still maintain a certain position in the materia medica, I can say with propriety, that amber and its preparations hold a conspicuous place. Although considered by many physicians as obsolete and not therapeutical, yet there are eminent practitioners in Europe, who could not well sustain the successful practice which they enjoy without this article. That amber is used as an agent in the healing art, is proven by the fact, that it continues to hold a place in the latest medical and pharmaceutical works, leaving no doubt that this ancient article still finds many admirers; and so, having a certain predilection for things that are ancient, I must be pardoned if I should be somewhat prolix in my description of it.

I shall first touch on its history, make a few remarks as to where it is found, and on the hypotheses of its origin, then allude to its position in the materia medica as a therapeutical agent, and conclude with its chemistry.

In the fabulous records of mythology are found a singular and amusing account of the origin of amber. Pliny relates that Phaeton the son of Phœbus and Clymene, had often importuned his father to grant him the high privilege of allowing him to drive for one day his chariot (the sun), but after repeated denials, the sire like an over-indulgent father, acceded to his request. The rash youth immediately took charge of the heavenly vehicle. The fiery steeds on finding themselves guided by an inexperienced leader rushed on their way, and instead of making the circuit of the heavens—plunged toward the earth, and a dreadful conflagration ensued. The heat raged from Ethiopia to the Euphrates, the Danube and the Rhine; every river was dried up and the mountains were clothed in flame. But Jupiter, the god of thunder, frowned upon the misconduct of the reckless youth, and launching forth one of his bolts winged with lightning, struck the misguided boy who fell into the Eridanus, (Po); its silent waters closed over him and the conflagration ceased. The mother and sisters of the youth stood on the shore of the river and bewailed his fate, but the imperious god, Jupiter, still offended, metamorphosed them into poplar trees, from whose pores there annually drop tears, which by the action of the sun's rays are solidified and become amber.

The first *authentic* knowledge that we have received of amber, is derived from the Phœnicians, an industrious people, who flourished about 2000 years before Christ, in a small maritime country on the Mediterranean Sea in the Asiatic province of Syria, called Phœnicia; and who were celebrated for their navigation and their commerce. They were the first who brought amber from the Baltic, and from England tin. From this time amber was an object of attention to the historian and naturalist. The Phœnicians called it Sachalth or Sacal and sold it mostly to the Greeks and nations of the orient. A knowledge of the place where it was found, they kept a profound secret, and thus monopolized the trade in the article. But when the commerce of the Phœnicians fell into decay, the Greeks were so fortunate as to learn the place of its origin from the Argonauts. The ancient Greeks commonly called amber Electrum, but Plinius called it also Lyncurium. The Greeks of the present time call it *Begonike;* the Egyptians like the Phœnicians call it Sachalth, or Sacal (meaning *drop rosin*); the Syrians on account of its property to attract light corpuscles, Harpar; the Hebrews Chaschmal and Chemer; the Arabians, Carabre or Ambra; the Persians, Karabe, that is, straw attractor; the Scythians, Sacrium; the Aestyers, Gentar or Glass; and the ancient Germans called it Bernotein, or Boernotein (from the low-German, *Coernen*—to burn;) signifying its combustibility.

Several works of the ancient Greeks called an alloy of gold with the fifth part silver, electrum; so says Plinius in his natural history; but where gold is mixed with the fifth part silver, it is called electrum. Sometimes this alloy is understood by that name, and sometimes the real amber, which on account of its price, was only purchased by the richer classes, and used as a decoration for their palaces.

Aristotle and Hippias mention that Thales, of Miletus, had already observed the attractive power of amber; and the former supposed from having found insects in this article, that it must have been formerly a liquid. Theophrastus, a pupil of Aristotle, placed amber amongst the minerals. It was dug in Lyguria, possesses an attractive power, and manifested the same property when brought in contact with iron. He speaks of Lyncurium as a mineral, which has its origin from the lynx; and that there was a difference in it, as it came from the male or female animal. Demostratus calls amber absolutely Lyncurium, believing its origin to be from the urine of the lynx, and judged it to be a fossil, from the fact that the peculiar habit of this animal in covering its urine with sand as soon as it is voided; for says he;—the amber which has its origin from the male animal, has a red and fiery color, while the same from the female was more pale.

The amber of commerce is found on the shores of the Baltic, on the Pommeranean, Livonian and Prussian side. Although we find it on the strands of the north sea, on Wordemy and other Islands of East-firesland, especially after heavy storms, it is not obtained in sufficient quantities to become an article of commerce. It is found also in Maryland and New Jersey; in marl soils, near London; in argillaceous layers near Paris; in slate quarries and coal-mines in Hennegan, Germany; in Sweden, Poland, Italy, Spain; and also in the Hu Kong Valley in Birmah.

Many of the ancient philosophers and historians have given their opinion of the origin of amber. Theophrastus, Charos, Philemon, Demostratus, Sudinos, Sotacus, Phyteas, Nicias, Theochrestes, Asarubas, Mnaseas, Theomener, Ctesias, Mithridates, Plutarch, Solin, Tacitus and Philostratus, Paracelsus ab Hohenheim, and Boethius, are with others agreed in the opinion, that amber is generated in the sea itself, and derives its origin from a peculiar fatness that almost all sea water contains, which Aristotle had already mentioned; so Pantoppidan in his Natural History of Norway, and Ctesias in his history of India, as an article which could be extracted by some chemical process from sea-water.

But while we find amber in other countries, as the United States (Maryland), France, Liberia, Saxony, Silesia, Bohemia, Hungaria and other regions of the world, in the present time not connected with the sea, the opinions of the former philosophers were rejected by later ones, who believe that it can only be washed away from the strata and bowels of the earth, where they are in connection with the sea, by means of the floods, and so brought to light. Meuman and Sendel agree in the opinion, that amber is a bituminous article, oxydized by sulphuric acid. Linnæus does not deem the vegetable origin of amber probable, but that it must be an indurated bituminous substance, exsiccated and oxydized by acid, and consequently a real mineral. Girtanner believes it to be a vegetable inspissated oil, brought to its condition by the vital action of the red ant (Formica rubra, Lin.) which lived in old pine forests, where amber is sometimes found.

But may we not look for the date of its origin to a period prior to that of the present creation of animals and plants? It is probable this substance may be considered as a product of the vegetable kingdom, as it is the case with copal, cumdammar sandarac, etc.; but the production of this article is interrupted by the extinction of the original plant, while the formation of the other gums still go on.

The visible impressions of branches and stems of plants discovered in amber, and so distinct in many places as to enable us even to distinguish their genera, coupled with the fact that the species of insect which fed on these plants have been also found enclosed in this article, leave no doubt that amber is an inspissated gum-resin, and of vegetable origin. Under, the celebrated naturalist, devoted much attention to the investigation of amber. He procured some specimens that contained particles of wood-fibre; these he believed belonged to a species of the coniferæ, which is now entirely extinct. From the very minute portions of the plant which was found in amber he gave a drawing of the original amber tree, gave a diagnosis of its genus and species, calling it *Pinites sucinifer*, and published the same in his Flora of the Primitive World. It appears that the fruits, seeds, and spike-like leaves, found in this article, do not correspond with any one of the pine genus of the present day; still there is every reason to believe, that it has its origin from some species similar and related to those that exist now. In addition to the rami or particles of branches found in amber, various other substances have been discovered; as drops of water, marl, roots, grass, leaves, seeds; and sometimes insects, as spiders, flies, wasps, beetles, etc.

Of late, Ehrenberg, of Berlin, submitted amber to close investigation by the aid of the microscope, and observed in it a peculiar formation, of a mouldy or musty appearance, having erect filaments. One, he believed, belonged to the genus Botrytis—the second he considered but not with certainty—was of the genus Penscillum; and on the third he did not decide. Copal has a striking resemblance to amber, in regard to its lustre, hardness, and color. We find pieces of copal containing portions of plants and insects, giving to copal every appearance of amber, and which is often fraudulently sold for it. But on close examination and comparison with the genuine article, the worthlessness of copal is soon detected.

The best kind of amber is called Bastard, and exported mostly to Constantinople and the Orient, and used as mouth-pieces for smoking-pipes. Experiments have been made to procure amber artificially. Voget exposed a mixture of resin, turpentine, balsam of copavia, iron, chloride of sodium, and concentrated sulphuric acid, to a continued heat; then submitted it to distillation, and received as products, an acid, an oil, and a resinous residue. He stated that he could scarcely discriminate between the oil obtained from the artificial amber and that of the genuine. He also formed artificial musk by combining this ambrosaic with three parts of nitric acid. In addition to the oil, he also obtained a small quantity of acid, but so trifling as not to allow him to make any experiments; but he succeeded in finding that the form of its crystals was identical with those from impure succinic acid. The same author gives the following, as his method of forming artificial amber:—Digest four parts of Venetian turpentine for eight days in one part of concentrated sulphuric acid. Then knead the mass with carbonate of soda and chloride of sodium; afterwards wash it well with water, and expose it on a glass pane to the action of the air for eight years. This artificial article does not possess the hardness of real amber, yet under a blow-pipe we perceive the same process of combustion and the peculiar smell of the genuine article. Dœpping, approved of this experimental process, and was of opinion that the formation of amber took place in the latter period of the primitive world, and is due to the action of sulphuric acid or of some of its compounds upon the resinous products of the confervæ in portions of the earth where the air was entirely excluded. It is highly probable that the influence of the internal heat of the earth has materially assisted this chemical process, if we may so term it; always bearing in mind that these actions when continued for thousands of years, give to amber its peculiar hardness, and tend to the perfection of succinic acid. In confirmation of this opinion, Dœpping refers to the naturalists Virey, Schweigger, and Morabelli, as holding similar views.

A few years ago there was found in the vicinity of Köten, in Germany, a bituminous fossil, possessing all the external appearance of real amber, and only requiring the action of more oxygen to render it as hard as the genuine article. This specimen was discovered some five feet below the surface of the earth near a strata of coal.

Genuine amber possesses the following physical properties. It is of a pale yellow color, sometimes assumes a brownish shade, transparent or semi-transparent; very hard, with a shell like fracture; its specific gravity is from 1.066 to 1.1, inodorous and tasteless, becoming electro-negative by friction, is softened at a temperature from 125° R. melts at 180° R. and exhaling a peculiar aromatic odor, swelling up and yielding the products already mentioned. When boiled, very little acid is obtained from it. With alcohol it gives about ten per cent of a soft yellowish resinous substance, with a particle of succinic acid. Ether and oils yield a small quantity of the same resinous material. Nitric and sulphuric acids decompose it. With alkalies there is formed a substance called Succinic, which is altogether insoluble in this agent.

THE TRUE CAUSE OF INTERMITTENT AND REMITTENT FEVERS.

BY M. W. HENRY, M. D.

From observations made while prosecuting the study of medicine in Western Texas, this subject naturally arose to my mind. I saw families residing on the rolling prairies of Travis county, where there was no local cause for either Intermittent or Remittent fevers, that I could perceive, except in the water; it was impregnated with mineral substances, but particularly with lime. The whole country rests upon a bed of porous, and in some places rotten limestone, through which the water percolates; it is hard and curdles soap freely, and after standing a short time deposits a slimy sediment; but is pleasant to the taste of those who were accustomed to drinking it.

Those families were surrounded by extensive prairies which had been burned off during the winter and spring, scarcely leaving a trace of decaying vegetable matter. There were neither lakes, swamps, nor any thing of the kind near to produce miasmata, the country being remarkably exempt from any thing of the sort. There was moreover an almost continued south wind blowing during the summer months, which would tend very much to dissipate any miasm which might be produced.

During the months of August and September, which are perhaps most prolific of fevers in this section of country, there is but little dew deposited on the prairie; it being the dry season of the year. There were none of the other agencies at work, which are usually supposed to be productive of miasm, except heat, and that of itself is not supposed to be a sufficient cause.

I have observed different members of those families looking forward with a considerable degree of certainty for an attack of intermittent or bilious remittent fever, during the summer or autumn. To have an attack was the rule; to escape it the exception. It is true that those attacks were mild and very amenable to medical treatment, but still they were unmistakable attacks of intermittent and remittent fever.

There were other localities, and particularly the Colorado valley near Austin, which were almost wholly exempt from those attacks. The water used in the river valley, was procured, for the most part, from wells which were generally from thirty to thirty-five feet deep. The water was found among beautiful, round, flinty pebbles, and was pure and soft, not containing lime in solution. Now if miasm had been the cause of those fevers, it is most probable that they would have been found more prevalent on the river valley, and not on the rolling prairie, as we find to have been the case. It appears to me to be almost evident from these facts, that the fevers in the instances which I have mentioned were not produced by miasmata, but by the combined action of the heat and water. That the heat alone is not sufficient to produce those diseases, is proven by the fact that other portions of the same country is exempt from them during the most intense heat of the summer. If the water was capable of producing them independent of the heat, we would find them them prevailing in the winter as well as in the summer, which we do not find to be the case.

All alkalies are known to be blood-impoverishing agents. They appear to break down the red blood corpuscles, thereby rendering the blood thin and fluid, and unfit for the proper nourishment of the body. Under their continual use we have debility and anæmia as the result. Lime is decidedly alkaline in its reactions; and the water above described as being saturated with it, seems to have the effect which we would expect to follow the administration of an alkali. Persons using it are generally more or less debilitated and anæmic.

Where those conditions of the system exist, we find a decided predisposition of the liver to torpidity, during our long and hot summers. The recent researches of Bidder and Schmidt, upon the amount of sulphur in the fæces, appear to show that not above one-eighth of the solid constituents of the bile is excreted. Headland says that, "Certain of the constituents of the bile are formed out of the blood for the purpose apparently of being *again reabsorbed*, at some part of the alimentary canal. One of these, Taurine, has been shown to be, to a certain extent, chemically analagous to quinia. Thus it appears to me to be not improbable, that this alkaloid may be of service in these diseases, by supplying the place in the blood of this biliary matter, which for some reason may be needful in the animal economy; or that it may actually become changed into the latter while in the system."

Liebig has shown that for the most part the elements of the bile reenter the blood after passing into the intestines, scarcely more than the coloring matter being excreted with the fæces. He has also pointed out the analogy which exists between certain vegetable compounds and a substance in the bile. Taurine contains the same four elements with quinia, with the addition of sulphur. There is a process which takes place in the blood in this class of diseases, which has been aptly compared to fermentation; and which I believe would be effectually prevented by a due amount of natural antiseptic of the blood, the Taurine. But as the process of rousing the liver to a proper degree of activity is often slow, and as the elements in the blood from which the liver is to eliminate the Taurine may be deficient, I think it is always advisable to commence the administration of quinia early in the attack, which I believe to be the most perfect substitute for the taurine yet discovered; and keep up its use until the liver can be roused to a proper performance of its functions.

I am aware of the fact, that in a majority of cases, these fevers can be cured by properly arousing the biliary secretions, while quinia, will generally render the cure more prompt. Where a cure is effected by quinia alone, the patient is peculiarly prone to a relapse, but where the vegetable cholagogues effect a cure, it is generally permanent. Taking advantage of this fact I have always combined with my treatment an active cholagogue cathartic with the most happy effect. I have not yet met with a case of intermittent fever which has resisted the above mentioned treatment more than a few days.

I have in some few instances had the patients of Allopathic physcians to fall into my hands, whose blood had been impoverished by a mercurial course, and I have found those patients much more prone to a return of the fever than most others. It is my opinion that in the instances last mentioned, mercury has so far impaired the functions of the liver that it is a difficult matter to stimulate it to a proper and permanent degree of activity. I consider it established beyond all cavil or controversy, that mercurials tend to impair the functions of the liver; hence I deem it unnecessary to occupy space by quoting authorities. There are plenty of living witnesses among the patients of the mercurialists, who can trace chronic hepatitis as resulting from a particular course of mercury.

It appears that from the history of the cases described in the earlier part of this paper, the consistency of the theory, and the unprecedented success of a rational practice based upon that theory, that it is successfully established, that the class of fevers usually denominated malarial, do often originate entirely independent of miasmatic influences. We find derangement of the biliary secretions a universal accompaniment of this class of diseases; and hence I conclude that if the liver could be effectually protected against miasm, *it* would cease to be a cause of fevers. I believe that miasm spends its force mainly upon the liver, by being first taken into the blood and thereby conducted to the organ. My theory of the modus operandi of miasm in the production of fever is this:

1st. The miasmatic poison is absorbed into the blood through the lungs, and conveyed by the blood to the liver; there, it either clogs the minute capillaries of the liver, or acts as an irritant to them, thereby producing inactivity, debility, and inflammation of the organ.

2nd. The liver ceases to secrete a proper amount of taurine, the natural antiseptic principle of the blood, and the inflammatory process is set up as a consequence in it.

Having for some time entertained the somewhat peculiar views herein set forth, and finding them fully sustained in practice, I have concluded to submit them to the readers of the College Journal, hoping thereby to cause others at least to consider them, and I would only ask that after a thorough investigation, they may be accepted or rejected as they are found true or false.

ACIDS.

BY PROF. C. H. CLEAVELAND.

Under the name of Acids, in my Classification, are included those acids only whose *acid* actions, chemically speaking, are their most marked manifestation when taken into the system. By this arrangement, many of the vegetable acids, as tannic, gallic, hydrocyanic, benzoic, and oxalic, are excluded, not because they are not possessed of acid properties when in the system, for they do induce acid actions and reactions; but because they have other and more marked medicinal forces which give to them their individual characteristics. For the same reason, most of the mineral acids are not ranked in this Order, in the present classification. These agents undergo very nearly the same chemical reactions in the human system that they do in the chemist's retort, or entirely uninfluenced by the presence of the vital forces.

Although the blood of living animals is always *alkaline*, yet certain acids may always be found in the healthy blood. These acids are naturally there in certain quantities, and if by any means the proper amount should not be present, the health of the individual would suffer from its absence. If this deficiency exists, the necessary acid should be given to restore the equilibrium, and when thus given, acids are strictly *restorative* in their action, and are properly classed with *Restoratives*. When, however, there is already in the blood the normal amount of acids, but the fluid contains an excess of the *alkalies*, the administration of an acid would lead to its absorption into the blood, where it would unite with and neutralize the alkali, forming a neutral compound, which might pass out of the system along with the excretions.

By uniting thus with an alkali, acids prevent the alkali from forming a destructive chemical combination with the tissues, which would lead to a solution and wasting away of those tissues. This action of the acids is strictly Catheretic.

As has been remarked, the presence of acids in the blood is not unnatural, for in that fluid we find some of the mineral acids, as well as some vegetable acids which are analogous to lactic acid. These acids, however, are never present in sufficient quantities to neutralize the alkalies also present, which are always in excess so as to give to that fluid a marked alkaline reaction.

It should be borne in mind, that although acids may combine with the alkalies present in the blood, the action of acids on the system differs widely from that of the salts which result from the combination of the two agents. This would seem to prove the opinion advanced by many in high authority,—that the acids are neutralized by the few alkaline matters found in the saliva, the bile, and the pancreatic juice, must be erroneous. If we remember that these secretions are but slightly alkaline, if not absolutely neutral, and that the acid when it arrives at the stomach comes in contact with a surface which while it rapidly absorbs the fluid contents of the stomach, at the same time secretes an *acid*, and not as is the case in other parts of the alimentary canal, an alkaline fluid, we must infer that so much of the acid as passes into the blood through the walls of the stomach, must enter that fluid as still an acid, and not neutralized by combining with an alkali.

In the blood there is always present soda, and usually potassa, in the form of a carbonate or phosphate, which, however, although combined with carbonic or sulphuric acid is still markedly alkaline; and the acid taken as medicine combines with the alkalies *in the blood*, and not, as is sometimes stated, before entering the circulating fluid.

Sometimes, when the amount of these neutral salts is not equal to the normal standard, the acid, after combining with the alkali or the alkaline carbonate or phosphate, forms a neutral salt, which is retained in the system to supply the deficiency. It is in this way that an acid acts as a Restorative, when there is a proportionate excess of alkali in the blood.

When there is a tendency to phosphatic deposits from a deficiency of the acids, the base of the phosphates, as lime, or soda, may be made soluble by administering the vegetable acids which have a stronger affinity for the alkali than the phosphoric acid has, and will supplant and take the place of that acid. In this way, the lime or soda which would have been deposited about the joints or in the bladder, in the form of gravel or calculi, will still be retained in the system to subserve useful purposes, if it be not in excess; but if it be in excess, it will, as it is in solution, be carried out of the system, probably through the kidneys.

Both the mineral and the vegetable acids will act in the manner detailed. The vegetable acids whether free or in combination, are good diuretics, and they or the resultant salts can usually be readily detected in the urine. The mineral acids, when free, are *astringents*; and although they may be detected in the urine, they do not tend to increase the secretion of the renal bodies. When, however, they are combined with some of the alkalies, their medicinal character is changed so as to partake more of the nature of the bases to which they are united. They may unite with the urea of the urine, causing a deposit of uric acid. The action of acids on the secretion of urine is not as powerful or as permanent as that of alkalies, and they are not to be relied on as diuretics. As the urine is liable to great variations of quality and amount in a state of health, proper caution should be observed in testing it, in order to decide whether acids or alkalies are demanded to maintain a healthy equilibrium. As the gastric juice is always acid, and may tend when it passes into the blood to lessen the alkalinity of that fluid, we find if it be retained in the stomach along with the recently taken meal, the blood is more alkaline at that than at other times, and the urine which is excreted just after meals, is more alkaline than the normal standard. As the acid of the gastric juice passes into the blood along with the digested meal, or is absorbed through the coats of the stomach, it neutralizes a part of the alkalinity of the blood; and when a considerable space of time has elapsed since a meal, the blood is found to possess less than the normal amount of alkalinity. If these facts are not borne in mind when the urine is tested, erroneous conclusions may be arrived at, which will lead to an injudicious, or hurtful medication. The value of acids in cases of phosphatic deposits after petechial fevers, and where the nervous systems are laboring under disease so as to waste those tissues which furnish the phosphorus for the formation of phosphoric acid, may be manifested by their acting as a corrective of the blood, to *prevent* phosphatic deposits ; or it may be manifested by producing a solution, as has been explained, after the deposit has been formed.

Acids will be found very beneficial when the digestive powers are weakened from want of the normal activity of the stomach. The stomach, when its action is strong and normal, secretes a considerable amount of gastric juice, which is acid ; and this acidity is necessary for the solution and digestion of food. If the amount of acid furnished by the stomach be less than the normal amount, the alkalies in the blood will neutralize so much of the acid that what remains is insufficient for the purposes of digestion. Or, the alkalies in the blood may have neutralized so much of the acid *in the blood*, that the enfeebled stomach is able to obtain but a scanty supply by its secreting organs. In either case the digestive function will not be properly performed.

When such a condition of the system is the cause of derangement of the organs of digestion, or dyspepsia, the administration of some one of the vegetable acids will supply the deficiency ; and the stomach being thus artificially supplied with the necessary agents, will be able to digest the food without pain or inconvenience. The mineral acids might perhaps answer an equally good purpose with the vegetable acids, but that all of them except hydrochloric acid are astringents, and might prevent the free secretion of moisture into the stomach necessary to enable that organ to perform its functions with ease and rapidity. Hydrochloric acid, being a most powerful solvent, might be found preferable in some cases to the vegetable acids.

If it be ascertained that the dyspepsia is owing to a deficiency of gastric juice,—acids, and not alkalies, will be demanded for the removal of the disease. And, although, after the food may have been for a considerable time in the stomach, it may ferment for the want of the gastric juice, and an alkali may be useful to prevent fermentation, still an acid must be administered before the diseased condition can be removed.

The *Refrigerant* action of acids may be explained in accordance with established chemical laws. It is now well ascertained, that in proportion as the blood is alkaline will be the rapidity of its circulation ; and of course as it is less alkaline than natural, will the flood be retarded, and the activity and force of the propulsive power lessened.

In all febrile disorders, and in all inflammations, there is an oxidation of the nitrogenized tissues going on, from which the urea, and urate of ammonia is formed which gives the strong odor to the urine. This oxydation may be owing to there being an excess of oxygen in the system; but is usually *continued* because there is not sufficient alimentary matter supplied by the stomach to neutralize the oxygen; and this great destroyer, acting in concert with the alkalies, tends rapidly to destroy the tissues. The usual material which oxygen acts upon, when the system is in a state of health, is the food; and as but little of that is taken during fevers, the deficiency of carbonaceous matter for oxydation is supplied by the structures of the system. The oxydation which should take place from the oxygen, *should* be that which changes grape sugar, or glucose, to lactic acid, and finally into carbonic acid; but as there is no starch taken into the stomach as food, there is no material furnished for the oxygen to work upon; and the animal heat is maintained by the burning up of the vital tissues.

As there is but a small amount of the material for forming lactic acid in the system, there must be a deficiency of that material present, and any thing which shall take its place and prevent its being burned up, will prove a preservative; and if the lactic acid accumulates because of the presence of such a medicine, it may properly be styled a *Restorative.*

As the lactic acid is deficient in quantity, it cannot neutralize as much alkalinity of the system as it would if its quantity was normal; and hence the blood in febrile diseases, is found after a few days, to have become more alkaline than in a state of health. If a vegetable acid be given in these cases, it will combine with the alkalies as lactic acid would have done, and *it* will be burned up in the place of the lactic acid. In this process also the acid acts as a *restorative.* As it lessens the alkalinity of the blood by allowing the lactic acid to accumulate, it diminishes the rapidity of the flow of the blood and the number of respirations, directly lessening the amount of oxygen inspired; and reducing the temperature of the system. As the burning process is removed from the tissues to the acid medicines taken, their farther wasting away is checked, and structures preserved.

This explaination is in perfect accordance with the almost universal demand for acid drinks and acid or sub-acid fruits, on the part of fever patients after the disease has continued long enough for the lactic acid formed of the starch in the food, to be nearly all burned up.

When these acids are combined with alkalies in the form of effervescing draughts, they are much more cooling and grateful if the acid is in excess, so that the patient wishes the acid taste modified by the addition of sugar, which, however does not lessen the medicinal power of the preparation, as the sugar is readily changed to lactic acid, or to carbonic acid, and passes from the system.

The neutral salt which is formed by a vegetable acid with the alkali in the effervescing draught, is changed to the carbonate of the base by the oxygen, and they act on the system, and on the secretions as alkalies. By this process, the acid aids in changing the lower to the higher salts of oxydation, as in the changing lactic to carbonic acid, and the alkali which was administered in connection with it, remains in the system if it is demanded as a restorative, or it is excreted from the kidneys to which it is a special stimulant. Hence these effervescing draughts have a double action, and are catheretics, or solvents, as well as restoratives.

As will be perceived from the foregoing, the principle use of acids in medicine, is to act as *Restoratives* although they are sometimes given as catheretics, when there is an excess of some one or more of the alkalies. They are also given as *antidotes* when an over-dose of an alkali has been taken, to counteract the poisonous effects of the corrosive poison. When ordered for this purpose, that acid should be selected which when united with the base, will form the most soluble neutral salt, and thus will be the most readily excreted from the system.

IRREGULAR SYPHILITIC SYMPTOMS

BY A. B. JACKSON, M. D.

I could not with satisfaction to myself, bring to an end a series of articles on syphilis without alluding to a variety of *irregular* symptoms that are occasionally manifested during the progress of the disease. Among these I shall notice alopecia, or loss of hair; iritis; syphilomania, etc.

The premature loss of hair is productive of great anxiety under any circumstances, but when a venereal taint is known to be the cause of the capillary waste, the pride of manhood receives a lasting shock. The consciousness of this apparent sign of early decay, stirs up a feeling of despair which is surpassed only by that attendant upon an actual loss of virility.

In just what manner the venereal poison acts upon the scalp, or hair bulbs, to cause the hair to fall, it may be difficult to understand. The loss is preceded by a profound change in the aspect of the patient, which is characterized by a want of brilliancy in the eyes; the skin becomes yellowish, cadaverous, and wrinkled, with bilious looking stains upon the cheeks and forehead; a dull, listless feeling keeps the patient at home, and away from society. These symptoms may exist for weeks before the hair falls in quantities to excite any alarm. The patient now observes very closely all losses that occur by combing, and by passing the fingers through it. Hair is found upon the pillow in the morning and upon the coat collar during the day. From day to day the scalp is less and less densely covered. Dry branny scales are thrown off in abundance, showing a very unhealthy state of the skin, as well as of the hair follicles; a few weeks more elapse and an untimely baldness results, the functions of the hair bulbs being too nearly destroyed to send forth a new growth.

The *treatment* for a case of syphilitic alopecia is to administer internally the iodide of potassium, sulphur, iron, kalmia, sarsparilla, and other remedies, so often recommended by me in previous articles on syphilis. If the patient be in circumstances to visit sulphur springs, and take sea voyages, so much the better, but these agencies should not exclude proper medication.

Topically, let there be applied friction; rubbing with a brush, or coarse towel three times a day, will do much toward restoring the natural activity to the skin. The "yellow wash,"—a weak solution of the yellow sulphate of mercury,—has been used to bring out the hair, when lost by the agency of venereal poison, but with what success I have not been able to determine. Pomades, of which castor oil forms one of the principal ingredients, have been employed advantageously; yet the results have not been generally satisfactory. Glycerine and the nitrate of potassa—a fluid ounce of the former, to ten grains of the latter—constitute a mixture, from which I have derived pretty uniform success in these cases. No "scratch," wig, or artificial covering, except the hat, should be worn.

Dupuytren recommended a preparation of cantharides, as being efficient in bringing out the hair, beard and eyebrows, when they have been lost by syphilitic affections. For the benefit of such readers as may wish to avail themselves of Dupuytren's favorite formula, I will give it:

℞. Medullæ ossium bovis, ℥j.
Plumbi acetatis, ʒj.
Balsam Peruviani, ʒij.
Tincturæ Cantharidis, ℥ss.
" Caryophylli,
" Canellæ, āā gtts. xvj. M.

This is advised to be used with light frictions.

Syphilitic Iritis.—The eye often is attacked during the progress of constitutional syphilis. Some surgeons report many cases, while others of equal experience rarely refer to it. In my own practice I have had six cases; and I have seen several others in hospitals. It is rare, according to my experience, to find a specimen of uncomplicated iritis. In nearly every case under my observation, I have noticed the sclerotic coat of the eye to be implicated in the inflammation. In some instances it is difficult to determine which structure suffers most. Frequently the retina and the conjunctiva become invaded by the disease. Both eyes are seldom affected at once to an equal degree; as the inflammation subsides in one, it invades the other. Among the first symptoms to attract attention to the eye when venereal is attacking it, will be a haziness between the organ and objects viewed; this obstructed state of vision may be noticeable for several weeks before any pain begins to harass the patient. At length the eye becomes watery and somewhat painful, particularly in a strong light. A circle of short, straight blood vessels may be observed around the cornea, not extending into it, but running in a direction towards its centre, or as if radiating from it. Now, all these symptoms may be present in a simple case of iritis, when no syphilis complicates it, yet the history of the case, or the presence of some other venereal symptoms, as eruptions, will determine the nature of the occular affection. The eye-ball is quite intolerant of pressure, ordinary manipulation exciting shooting pains through the eye, the forehead, and the temple. As the disease progresses, a peculiar muddiness and dullness fix upon the eye; and vision becomes much impaired from the opaque condition of the humors, and the closure of the pupils with exuded lymph. During the whole course of the disease, the iris manifests much sluggishness of motion, finally becoming insensible to the stimulus of light, the pupil being very nearly closed. There seems a great tendency of the eye to form coagulable lymph, and to contract adhesions. The edge of the iris bordering the pupil, changes its even circular shape, and becomes oval or square, or contracted into another irregular figure, while some portion of it remains regular. This distorted state of the pupil can be nicely exhibited by the application of belladonna to the eye, when the adhesions will cause the pupil to dilate irregularly, the adherent parts retaining their position. In bad cases, the iris becomes attached to the lens, causing opacity of that body; or the pupil is permanently closed by the organization of the exuded plastic lymph, one or more of the several structures of the eye become too far disorganized to admit of perfect restoration.

In connection with the local symptoms just enumerated there will generally be considerable constitutional disturbance, continued or paroxysmal fever confining the patient to his room; the appetite and general strength will fail; and the patient will narrowly escape, if he be depleted in various ways.

To manage a case of syphilitic iritis successfully, requires skill and perseverance. In no forms of syphilitic disease has mercury been so highly extolled as in this. The mineral has been regarded as performing double duty in the treatment,—first as an antisyphilitic, and, secondly, as a solvent of the exuded plastic lymph. The more enlightened portion of the profession of the present day rarely give mercury in this affection. In proof of this assertion I could quote authority at length; but it is not my intention at this time to show how authorities stand. Give antisyphilitics, and especially iron. The muriated tincture is a good form in which to administer the medicine. Give it in thirty drop doses, having it diluted in three times as much water. Repeat the doses four times a day, and follow up the medication for weeks. Constitutional fever must be subdued by the administration of aconite. Do not fail to give the iodide of potassium in case the iron is not well borne. If the glandular system has been blocked up by the long habitation of the disease in the body, it is to be opened with gland stimulants. Turpentine in such cases is not to be neglected. Leptandria virginica in powder, given in doses to move the bowels every day, is needed; it may be combined with iris versicolor, and kalmia, using sassafras or some other aromatic to disguise the remedies. The parts about the eye must be often moistened with the following mixture:

℞. Glycerine, f℥j.
Ext. belladonna, grs. xii.
Aconitina, grs. iv. M.

This may be applied with a camel hair brush, four or five times a day. No matter if some of it gets between the lids, as that does no harm, and even assists in keeping the pupil dilated, which is a desideratum in the treatment. The belladonna does this, the aconitina particularly destroys the pain, the glycerine serving as a solvent of the others. The application of water to the eye and temple may afford relief in some instances, yet it often aggravates the pain. The use of electricity commonly provokes the symptoms, though in the instances I have known it used, it may not have been administered according to the most approved plans. Leeches about the eye are used with varied success. They commonly afford temporary relief, but are quite unsatisfactory as a curative agency. Blisters behind the ears and back of the neck avail nothing. The ammoniacal paste of Gondret—pomade de Gondret—used upon the forehead does little good. Rest and absence of a strong light are essential. A good diet, when it can be borne, is better than the usual plan of starving the patient. Tonics and supporting treatment are particularly indicated, as evidenced by the mental and physical depression produced by the disease.

Syphilomania.—Of all difficulties that test the patience of the physician there is none to be compared to a case of venereal madness. By syphilomania, I mean an uneasy state of the mind attendant upon harboring the idea that the syphilitic virus is still in the body, and is to afflict it forever and ever. Every unpleasant or unusual sensation will, by the patient, be laid to the secret workings of venereal poison ; every pimple and phlegmon is a chancre, or the product of an old infection. Marriage is not to be considered by such haunted individuals, for they fear they shall contaminate their wives and children. The doctor is dogged for medicines to eradicate the imaginary disease. He is often asked what evidence is there that the poison has been entirely expelled from the body. This question is generally a poser, unless one is flippant at answering questions he knows nothing about. To say to a patient that he has no longer a trace of syphilis in him, after he has once had constitutional manifestations, would be making a declaration that I would not be generally willing to strengthen by my humble opinion in the affirmative. It is well known that in many instances the poison of syphilis is carried for weeks, before it shows itself in the primary form ; that it often requires months for the secondary or constitutional symptoms to appear after those of a local character have disappeared ; and, that two or three years often intervene after a certain set of the systemic phenomena subside, before others are ushered in. The only proper course for the physician to take in such cases is to prescribe suitable remedies until all appearances of the disease have vanished ; and for weeks or months afterwards, carefully watching the patient to make sure that no fresh onset of the inveterate malady "steals a march" upon him. A particle of virus left in the system, unless destroyed or held in check, like leaven, soon multiplies until the entire fluids and solids of the body are re-contaminated. The poison is so subtle too, that it may course up and down the alleys of the body without the possibility of detection, except it show itself by producing eruptions, ulcers, or tumors. The physician, then, will hesitate before he gives the patient positive assurance of immunity from subsequent attacks. A patient having venereal virus in his blood, under ordinary circumstances, may escape any disagreeable symptoms, but as soon as his usual vigor is reduced by sickness, exposure, or over-exertion, the poison springs into action, and sets the fluids of the body into a state of ferment. Under such conditions, many a patient succumbs to the malignity of the disease, who under more favorable auspices, might never have known that the hateful taint was being carried.

False appearances of venereal, or pseudo-syphilis. There is a strong resemblance between certain diseases, especially during some period of their existence. The premonitory symptoms of measles, small-pox, and other eruptive complaints, do not differ essentially, yet at a later period the distinguishing features of these diseases are easily recognized. A lump of a benign character in the female breast may create a suspicion of cancer; an ulcer upon the genitals, especially after a suspicious intercourse, excites alarm, a real chancre being suspected; simple inflammation of the fauces under ordinary circumstances is not regarded as a serious difficulty, but to a person conscious of having venereal poison lurking within, any throat symptoms are harbingers of evil.

Every physician of experience has repeatedly seen herpetic vesicles, abrasions, and ulcers upon the genitals, not essentially different from the disease they imitate. I have frequently been solicited to treat an ulcer upon the penis, which was regarded by the patient as a chancre, which was no more venereal than it was a cancer. The sore presented some hardness about its base, was sluggish, and excited swelling and tenderness of one or more of the inguinal glands; yet it was no true chancre. The pus of such ulcers is not infectious, nor will it produce a chancre when innoculated into the same or another individual. These ulcers heal much more rapidly than chancres; they require less treatment; a light cauterization with nitric acid, and a few subsequent dressings of some dry powder, as chalk, charcoal, or calomel, assist them to heal rapidly. Here, for the benefit of those whose prejudice alone has led them to entertain extreme views on the mercurial question, I would remark that I have found dry calomel a very excellent mixture to apply to indolent, suspicious ulcers about the genitals. Whether it be the moiety of chlorine in calomel that proves serviceable, or the particular chemical combination, I am not ready to say; but as other chlorinated preparations exert a very favorable influence, mercury without chlorine seldom doing good, and often mischief when applied to such sores, I am disposed to give more credit to the chlorine of the calomel, than to the mercury. Be this as it may, there could little harm arise from the absorption of so minute a quantity of mercury as might take place from its topical application in the manner suggested above.

I cannot close this article, without alluding to an ulcer or fissure that sometimes forms just within the meatus urinarius—fossa navicularis—of the male. It resembles concealed chancre, as a venereal sore within the urethra is generally called, and often comes on after an impure connection, especially if a stricture exist farther back in the urethra. The patient complains of a hardness near the meatus, and says the urinary flow is not natural, the stream splitting or scattering. A small quantity of pus, too, can be pressed out of the urethra just before urinating. If, now, the lips of the meatus be held apart, and the fossa navicularis exposed by using a grooved director as a speculum or spatula, to hold away the upper wall of the canal at this point, an ulcer longer than it is broad will be seen occupying the bottom of the urethra to the distance of a quarter of an inch. This is not a chancre, but an ill-conditioned sore that will not heal without local treatment. I have brought many of them to a successful termination in the following way. Having exposed the ulcer in the manner indicated above, I apply to it a probe of wood that has been wetted in nitric acid. The probe is no larger than the common silver one of the pocket case, and is dipped in the acid, then wiped before use, enough remaining in the wood to change the indolent character of the ulcer. The cauterization is repeated every other day for three or four times, and dressed with some absorbing powder after urinating. Other irregular and occasional symptoms present themselves in the course of an extensive practice, but as I have prolonged this subject beyond the original intention, those which have been submitted must suffice.

LEPTANDRIN.

BY M. W. COOPER, M. D.

I find among many in the profession, a tendency to doubt or deny the medicinal properties ascribed to a concentrated preparation denominated *leptandrin* by the manufacturers. I have used the preparation extensively for the past three years. I find it one of the most efficient cholagogues. I could not well do without it in the incipient stages of dysentery, used alone, or combined with articles to make it easy of administration. When pills are preferred, I combine it with Castile soap. I find that from eight to twelve grains will generally remove all the urgent symptoms, leaving nothing more to do but to attend to the hygiene of the patient. It also acts with marked benefit in the latter stages, where a thorough bilious evacuation has not been produced, and where the urgent symptoms remain present. In my hands it has not only been a useful, but a certain agent in such cases, operating as a cathartic in from eight to twelve hours, though sometimes longer.

In chronic dysentery of long standing, I use it alone, or combined with astringents. In chronic dysentery of children, I have used it alone, and find it superior to any other treatment. In habitual costiveness, after a thorough evacuation of the bowels with more active agents, I use it alone and find it a curative agent.

In cholera infantum, combine with aromatics it acts like a charm. In typhoid fever I combined it with quinia, ipecacuanha and capsicum, and in every case have succeeded in removing the febrile state, and producing and retaining a healthy action of the secretions in a short time.

In many old chronic cases of general torpidity of the secretions, I have used it with benefit. After the active symptoms of milk sickness have been controlled, I have used it and find those cases improve faster, and more fully recover from the entire effects of the disease, than those treated with other agents.

CASE OF TRANSFUSION.

BY J. B. ALFORD, M. D.

In May last I was called to see Mrs. L——, who was suffering from passive menorrhagia of four weeks duration, it not having ceased since her last regular menstrual period. She had been confined to her bed the whole time, and was so reduced from loss of blood as to be unable to turn herself in bed, and every attempt on her part to do so, caused an increase of the discharge from the vagina.

Pulse 119, respiration hurried, the pupils of the eyes much dilated, and the countenance haggard and wild in the extreme. On examination of the os uteri, I found it turgid and very sensitive to the touch, but with no appearance of ulceration. I then explored the cavity of the uterus, but could discover no cause for the prolonged discharge, except an apparently soft spongy state of the walls. The examination caused an aggravated flow of the sanguinous fluid, which on standing a short time became of a greenish color, but did not coagulate.

To arrest the discharge, I introduced into the uterus a flexible catheter and injected one ounce of dilute tincture of chloride of iron, which caused some pain. Immediately the patient became insensible. After using all other available means to restore her to consciousness, I resolved to try the operation of transfusion as the only means left in this case to restore life. At this time pulsation had entirely ceased at the wrist. Hot applications were constantly kept to the feet and limbs. The husband proposed to submit to the loss of blood, and he being a strong robust person I thought him a fit subject. The blood was conveyed by means of a long flexible catheter, it being filled with blood previous to being introduced into the vein of the patient, to prevent the entrance of air.

She returned to consciousness after about a pint of blood had passed. The blood was allowed to flow until I supposed about three pints had been transferred, when the current was stopped. The pulse was then 97, and the respiration easy. I then continued the injections into the uterus every two hours, until she had taken six. The patient was kept quiet, and supported by suitable medicine and diet. She recovered quite fast, and at the end of ten days was able to walk about the house.

ARNICA MONTANA.

BY T. C. MILLER, M. D.

By some writers I think the value of Arnica as a therapeutic agent is over esteemed, while others, as Oesterlin, Pereira, Seifert, and Plagge, consider it of little or no value. Notwithstanding this want of confidence, it is well-known that on animals as well as on man, it does produce a very manifest effect. It is true, that the therapeutical effect of arnica cannot always be plainly traced to its known physiological impression, as its most marked *local* manifestation is in the production of a sense of itching, smarting, or erethism, of the nerves of the part to which it is applied. Ochsenheimer observed, that the external use of the strong tincture produced so much erethism as to cause gangrene.

Hertwig and Viborg reported that the *internal* use of the flowers to horses in doses of twenty grains, produced a slight increase in the activity of the pulse, of the temperature of the skin, an increased secretion of urine, and occasional tremor of the muscles. When a larger dose,—from four ounces to a pound—there was observed also a raising of the hair, a full pulse, tremors of the whole body, frequent gaping, and frequent discharges of urine and fæces, with final prostration and weakness. Still larger doses always produced vomiting. Post-mortem examinations revealed active engorgement of the smaller blood-vessels in all parts of the body.

Experiments on man have been made with this plant, by Joerg, who reports the results produced on twelve persons with doses of from one grain to thirty grains of the flowers. More recently, Sneller has made a trial upon himself and on some of his friends.

Joerg perceived that the intestines and the brain were specially influenced by it; that it produced burning of the throat, nausea, painful and straining sensations in the stomach, eructations, swelling or a tympanitic condition of the abdomen, increased vermicular action of the intestines, increased flow of urine, increase of the pulse and respiration, increased secretion of the *skin* and of the urine, obscured vision, vertigo, disturbed dreams, followed by debility and a sense of general uneasiness. The root of the plant produced effects similar to those produced by the flowers, but appeared to act with less severity on the intestines.

Sneller took in all, seventy-eight grains of the watery extract in twelve days, and when he took it in doses of from six to ten grains at a dose he observed it to produce a bitter, nauseous taste, dryness of the mouth, increased eructation and borborygmus, and disturbed sleep. In doses of ten grains of the extract, it produced a burning sensation upon the tongue like pepper, which sensation continued three hours, disturbance of the stomach with nausea, colic pains, flatulence, torpor of the bowels, confusion of the intellect, convulsive pains in the limbs, bloody stools, a slight efflorescence on the face, and increased flow of urine.

Barbier relates a case where an infusion in considerable quantities was taken, which even soon after the first dose, produced pain in the cardiac region, troublesome respiration, heaviness in the head, deafness, faintness, and swooning. One point of importance in practice, is the effects it produces on the brain. These effects however, are not constant or certain, but it may produce them. The *root* more frequently produces cephalic symptoms, than the leaves or flowers. The flowers act more upon the sympathetic or splancnic nerves, and thence upon the blood-vessels and the circulation.

Arnica is *contra-indicated* where there is plethora, congestions, inflammations, erethism of the nervous systems, or in debility accompanied by irritability of the stomach or any part of the digestive apparatus.

I have been accustomed to use it for twenty-eight years. In nervous fevers characterized by torpor, this remedy is very valuable to rouse the sinking energy of the nerves, particularly the nerves of the abdominal viscera, while at the same time it increases the contractile power of the muscular fibres, and especially the fibres of the unstriated muscles of the walls of tubes and ducts. It is a very valuable remedy in enteric fever, and where there is colliquative hemorrhages, passive sweatings, and exanthemata of the abdomen. It will not take the place of valerian, quinia, camphor, or the acids, for its action on the system is unlike that of either and all of these. These four great remedies have each its own distinctive influence, and each is a valuable aid to the others, when needed.

In inflammations combined with torpidity, as in typhoid pneumonia, in inflammation of the brain and its coverings, in gangrene, and other similar affections, it requires oftentimes, camphor, quinia, and perhaps opium, to be given in conjunction with it.

In obstinate maltreated intermittents, with torpidity of the abdominal viscera and engorgement and enlargement of the spleen and liver, and perhaps abdominal dropsy; in the so-called typhoid cholera, arnica is of great value. My Brother, Lewis E. Miller, uses it in conjunction with ether in those cases.

In old, atonic gout and rheumatism, especially locally applied, it always is of value. In dysentery, where the disease is complicated with torpidity of the bowels, or constipation, exhaustion, or colliquative dysentery, it is peculiarly indicated. In these cases I consider the root preferable to the flowers.

In passive hæmorrhage, of a scorbutic character; in discharges from the respiratory or the reproductive organs; in bloody or serous extravasations caused by contusions and hurts, it is the main remedy I depend upon. It is also very valuable in atonic dropsies.

The external use of the flowers, in tincture or infusion, is the best agent I have tried in acute hydrocephalus.

In paralyses, particularly where the paralysis has been caused by mechanical influence upon the brain or spinal marrow, but the nerve structure remains intact—not by congestion or softening of the nerve structure—and in the commencement of amaurosis, it has always proved of utility. Theilmann, in treating amaurosis, made use of an infusion of three drachms of the flowers to eight ounces of water, and gave a large spoonful at a dose, once in three hours.

In enlargement, torpidity, or engorgement of any of the abdominal viscera; and also in suppression of the menstrual, lochial, or hemorrhoidal discharges in consequence of torpidity, its use is of great value.

Leidbeck speaks very favorably of it in varicose veins of pregnant women. I have derived great benefit from it in such cases.

Schneider praises the etherial oil of arnica flowers in chronic cases of paralysis of the limbs, the result of apoplectic attacks. So also in obstinate blenorrhœa of the respiratory, urinary, or reproductive organs.

Wood does not mention arnica in his Materia Medica, and in his Dispensatory speaks of it quite slightingly, as a recent "domestic external remedy," and yet eighteen years since it was in use by a very intelligent physician, internally, in the low form of typhoid fever. He was so successful in its use, that he considered it his *magnum Dei donum.*

M. Hauner, as narrated in the College Journal, Vol. I., Page 343, has made use of arnica in serous effusions, with marked advantage. It is gradually, but somewhat rapidly coming into use, not only as an external, but as an internal remedy.

The dose equals the strength of from one to five grains of the root or flowers, for an adult, and proportionally less for children, repeated three or four times a day.

MORBUS COXARIUS, OR HIP-JOINT DISEASE.

BY PROF. A. J. HOWE.

Several terms have been given to a common affection of the ileo-femoral articulation, yet *morbus coxarius*, or *hip-joint disease*, is sufficiently well understood to avoid misapprehension. Few terms express the real pathological state of a case, and no exception is needed in the present instance. The disease to be considered is as purely *arthritis* as any inflammatory difficulty that ever attacked the knee or other articulation. The origin and progress of arthritis are similar in all joints, nor need the results be left out of the comparison. It has been thought that inflammations of the vertebral, hip, and knee articulations arose from a scrofulous or cachectic habit of body, yet there is no more positive evidence of such an origin than there is when the elbow or shoulder joints are attacked with *synovitis* or arthritis. The articulations first mentioned have to sustain more or less pressure in supporting the parts above, while the latter are relieved by the traction produced by the weight of the arm. The muscular contraction is sufficient to effect considerable pressure in either instance, and is to be considered a source of aggravation in every case.

The *etiology*, or cause of hip-disease, is generally not well understood. As asserted just now above, the affection has been supposed to depend upon a scrofulous cachexia. The supposition undoubtedly arose from the prolonged and intractable character of the malady, as well as the general appearance of the patients. I am now fully persuaded, however, from cases coming under my immediate observation, and from the reports of others, that some *injury*, whether particularly noticed at the time or not, is the immediate or remote cause in the majority of instances. I am aware that the great body of the profession entertain other views, claiming in almost every instance that *scrofula—ille morbus incomprehensus*,—is the principal origin of the disease, yet I respectfully beg to differ from them, basing my reasons for so doing, upon well observed cases. I would not be understood as ignoring the influence of a cachectic habit or perverted constitution, in hastening an attack or the establishment of any articular disease, for that would be unreasonable in the extreme. I contend, only, that the cause is oftener traumatic than constitutional. Scrofula is commonly considered hereditary, and too persistent to be ever entirely eradicated from the system; yet it does not appear either from those who have suffered from hip-disease, or from their progeny, that they are much more scrofulous than others. Occasionally a child having a parent who has suffered with hip-joint disease, will be attacked with the same disorder, in which case there may have been some degree of predisposition depending upon constitutional cachexia; such isolated instances, however, prove very little, as it is no uncommon thing for parents descended from healthy progenitors, and having several sound children, to have one among them that suffers from morbus coxarius, notwithstanding the Horatian maxim, "*fortes creantur fortibus*." It only remains to be said, that when hip-disease occurs in a scrofulous subject, the complication renders the case more intractable.

Symptoms.—The early symptoms of hip-disease are often not severe and pass for neuralgia or rheumatism. The first that may attract the child's attention, or of which he may complain, will be pain in the hip and knee-joints or the parts adjacent to these articulations. This will generally be noticed after violent exercise, or too long exposure to the chilling influences of air and water. The patient manifests aversion to exercise, preferring repose, though usually of an active disposition. Days or weeks may be passed in this way, without evidence of much amelioration or aggravation of the case. At length the disease assumes a graver aspect, much distress in the limb being experienced. The pain is frequently more severe at the knee than at the hip, therefore it is occasionally difficult to convince a patient that the seat of the disease is not in the knee. The illusion arises from the peculiar distribution of the obturator and anterior crural nerves. The former has filaments distributed to the synovial membranes of the hip and knee-joints; and the latter to the same and proximate structures, as well as to the integuments on the inside and front of the knee. This exemplifies the repeated observation, that when disease affects one set of terminal branches of a particular nerve, the pain is often referred to the extremities of other branches given off by the same nerve. The illusion is made still more complete in hip-joint disease, by the tenderness on pressure at the knee, which is wholly due to sympathetic pain. The above symptoms will not have existed a great length of time before the nates become flattened by wasting of the glutii muscles. The attenuation seems to be due to morbid reflex nervous action, the effects of which may be seen in wry-neck, talipes, and various other affections. The pelvis now begins to be distorted from the patient's standing on the sound limb, which raises up that side, and depresses the other, giving the lame leg the appearance of being longer than the other. In rare instances, however, the patient draws up the pelvis on the diseased side, to enable him to steady the weight of the body on the other limb, making the unsound limb apparently the shortest. The distortion of the pelvis produces a slight lateral curvature of the spine, with elevation of one shoulder, which exists in almost all subjects who have suffered with morbus coxarius in early life.

In the *second* stage of the disease, which is distinguished from the first only by being more advanced,—the pain is increased, especially at the knee, and the parts about the hip have become more intolerant of pressure. Pain is much aggravated, too, by concussion produced by striking the trochanter, the knee, or the sole of the foot. Also by taking hold of the limb and rotating it, especially inwards, great pain will be excited. More or less swelling about the upper part of the thigh is present, though there will be flattening of the buttock, giving it an unnaturally broad appearance. The apparent elongation of the limb may still exist, yet during the last stage of the disease there will be apparent shortening. In either case, there is no real variation in the length of the limb, as may be ascertained by measurement from corresponding points of the pelvis and the extremities, the patient being placed in a horizontal position, and everything made favorable to a correct result. It must be borne in mind, in considering the cause of the apparent shortening, that position alone in a healthy subject can be made to give seemingly unequal lengths to the limbs. While in a sitting posture any one can draw one hip back, and push the other forwards, giving the thighs at will, from the want of evenness at the knees, an apparent inequality of length, which amounts to an inch or more. A voluntary distortion can be given to the pelvis, imitating the declivity, which is characteristic of hip-joint disease.

The general health of the patient has suffered materially by this time, from the prolonged nervous irritation,— febrile paroxysms, loss of rest, and want of appetite, having greatly reduced the usual vital stamina. If the parts about the hip-joint be carefully examined, fluctuation can be felt. The fluid which causes this, is not yet purulent, but appears to arise from a preternatural effusion from the synovial membrane.

In the *third*, and what is usually denominated the last stage of the disease, the swelling is greater and the pain more intense. A fluctuating tumor may now exist in the vicinity of the articulation, which is commonly found just beneath the great trochanter, or on the inside of the thigh near the pelvis. When the tumor discharges, whether by breaking itself, or by being lanced, the fluid, now purulent, will be of an unhealthy character, indicating, if not carious destruction, at least the degenerate condition of the malady. The abscess is not certain to point externally, but occasionally ulcerates through the bottom of the acetabular cavity and finds escape into the rectum or vagina. Discharging where it will, an abscess about the hip-joint is rather unfavorable. The position of the limb, which may be said to be characteristic of the disease, now is fully presented, and in many respects strongly resembles a dislocation of the head of the femur upward and backward. The appearance of the limb is pretty faithfully represented in the accompanying diagram.

The thigh is now apparently shorter, somewhat adducted, inverted, and flexed, though previously the limb has been apparently elongated, abducted, and everted. It is at this stage that the older surgeons supposed that "spontaneous dislocation" occured, of which more will be said hereafter. The abscess having discharged for sometime through one opening, another is apt to form, the first having closed or become obstructed. During the closure of one opening and the formation of another, it is common for the patient to suffer much from rigors and febrile paroxysms. Cases sometimes terminate fatally at this period, symptoms of a typhus character having preceded the dissolution.

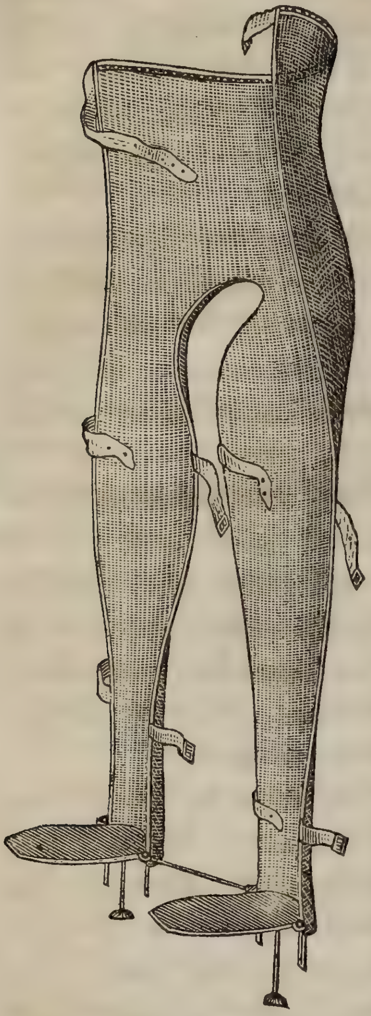
Pathology.—The occasions for examining the hip-joint in the early stages of morbus coxarius, are so rare, that very little exact knowledge in regard to the condition of the joint at that time has ever been obtained. In a few days after the initiation of hip-joint disease the capsular ligament becomes somewhat distended, not with ordinary synovia, but a turbid serum, especially if the inflammation has been pretty active. At a little later date, shreds or flakes of lymph will be noticed either floating in the serum, or adhering to the synovial membrane. The tissues proximate to the articulation appear more vascular than usual, and in some places plastic lymph is deposited in considerable quantities. At a subsequent and more advanced stage of the disease, the capsular ligament has become excessively distended, or may have even bursted, allowing its fluid contents to escape into the areolar spaces about the articulation. It is at this time that distinct fluctuation can be detected, though a true abscess which is common in the third stage of the disease, has not yet formed. Plastic lymph is exuded among the structures which mechanically impedes the action of the muscles, and by pressure upon the nerves distributed to the parts below, interferes with the normal position of the limb.

If the fluid which distends the capsular ligament, or the super-imposed tissues after the capsule has yielded, does not find timely escape, it will do much towards disorganizing the structures in which it is confined, almost surely terminating in abscess. During the progress of the disease much lymph will become organized into false bands, and blend together the various tissues, thereby greatly interfering with the mobility of the joint. When abscesses form, in time their walls will collapse and degenerate into sinuses, around which every structure seems to become involved, until nothing like natural motion can be attained. As the disease progresses in the joint, the articular cartilages take on ulceration, and finally the bones themselves. The pressure, produced by the ordinary muscular contraction, of the head of the femur upon the upper part of the acetabular walls, the parts coming in contact being unprotected by the usual articular material, causes absorption of the hard structures, and a consequent displacement. In some rare instances the displacement amounts to dislocation, yet in almost every case there is no luxation, as has been pretty conclusively proved by the late Prof. Rust of Germany, and Prof. March of Albany, N. Y. Although the Sweets and their followers, still go about the country *reducing* (?) femurs that are only apparently dislocated, no surgeon of the least professional standing, of the present day, allows himself to be so far governed by appearances, as to attempt a systematic reduction upon a limb that has been distorted by an ordinary case of hip-joint disease. Many surgeons, in the United States at least, have not been willing to accede to the views of Rust and March, but have laid hands on every specimen within reach,—and there is no lack of them,—to see if the new doctrine, which was so fast gaining ground in regard to "spontaneous dislocation," could not be controverted. Among the most diligent of these has been Prof. Henry H. Smith of Philadelphia, who claims to have four specimens in his cabinet which bear "evidence of the presence of luxation." Several specimens are in existence, which are adduced to show that dislocation may take place during the progress of hip-disease. Such may reasonably be the case, if violence, in addition to the tendency of the affection, be admitted to have any share in the matter. Frequently a sound femur is luxated, and remains so ever afterwards. If a diseased one then, should suffer dislocation, and continue in this state, it would be in no way incompatible with a right understanding of this pathological point.

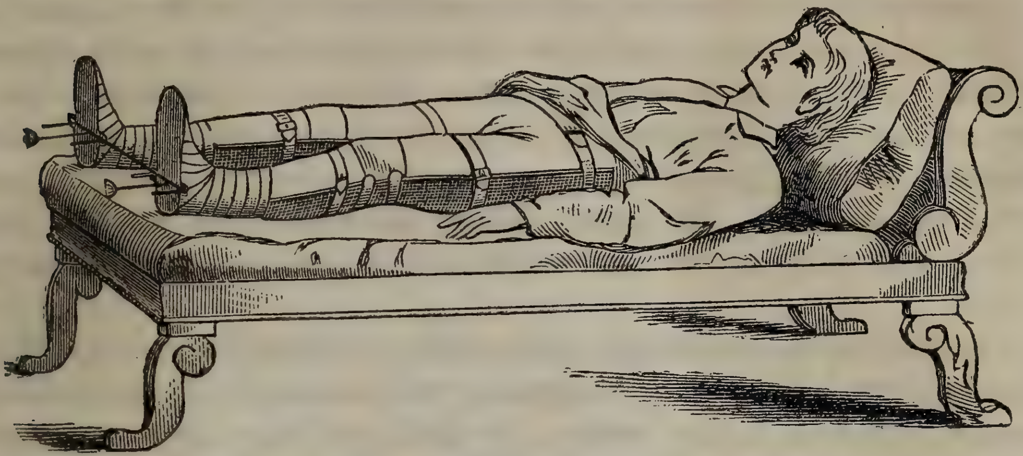
Prognosis.—The prognosis in hip disease has hitherto been considered decidedly unfavorable, both on account of the danger of the disease, and the length of time consumed in the treatment, to say nothing of its imperfect results. The patient, then, or his friends should be made aware of the uncertain consequences, even in a case that presented many favorable symptoms. Few cases undertaken in the advanced stages of the malady ever recover without some deformity, or partial ankylosis. Under the old plan of treatment, a complete recovery was considered extraordinary; recent discoveries in regard to the pathology of the disease, and improvements in the manner of managing the patient, have done much to modify the results obtained.

Diagnosis.—The history of the case, considering the symptoms as already detailed, will generally be sufficient to establish a correct diagnosis. Neuralgia and rheumatism have been mistaken for the disease, yet if the case be carefully studied, testing the sensitiveness of the articulation by concussion, and estimating the causes of the peculiar position assumed by the limb and pelvis, no failure can be made in coming to a proper understanding of the complaint. Those who have little experience with hip-disease may for a time be misled by an acute abscess in the vicinity of the joint, yet little harm could result from such an error, beyond the distressing apprehensions unnecessarily created in the mind of the patient or his friends. In very rare instances, a separation of the head of the femur from the neck of the bone, either by fracture or simple diastasis, has been mistaken for morbus coxarius.

Treatment.—In regard to the best plan of treatment for hip-disease, there is among surgeons much difference of opinion. Not a few of those who claim to be particularly progressive in their ideas, say that patients laboring under the affection in question, should be driven on crutches into the open air, declaring that their only hope was in food and exercise. That sounds very well, and the course is particularly agreeable to those who know nothing of the disease, except that it is unpleasant to treat, and rarely terminates in perfect recovery. But there is a "best" plan of treatment for this affection, and that must be based upon sound pathological views. To send a patient into the street on crutches, when he ought to have his limb quiet and under the influence of extension and counter-extension, to overcome the pressure upon inflamed surfaces, is a highly censurable and summary manner of disposing of a case. Occasionally a patient will recover while crutching about with the greatest freedom, yet where one recovers, ten are at length brought to the bed from which they never rise. Hip disease is more local than constitutional, and must be treated accordingly. In the early stages of the disease powerful anodynes should be applied to the region over the joint, to prevent the affection from making progress, and to give the irritated nerves an apportunity to rest. Pain of a long continued and severe character will wear out any patient. To overcome the distortion that has already taken place in the pelvis, an apparatus like the one represented in the diagram should be used. It is made of woven wire, having its border bent over and soldered to give it firmness. The material should be of sufficient firmness to prevent it from warping, and accomodating itself to the deformity of the body. It is shaped like the posterior half of a pair of pants; and on that account has been facetiously styled the "wire breeches." Two moveable foot-pieces are connected with the leg parts, to which the feet of the patient are to be lashed, and extension made upon them by means of thumb-screws. The counter extension is principally made upon the tubera ischii and the parts against which the upper end of the "breeches" rest. A space is left at the bifurcation of the apparatus, to allow fecal evacuations, without disturbing the position of the patient. Before the instrument is applied it is to be well lined with soft cloth or batting. It is essential that the apparatus be well fitted to the patient. A plaster of aconite, or of the extract of belladonna, should be kept next to the skin, covering the affected joint. In case the fluctuation is pretty distinct, and the articular tissues seem to be distended with fluid, a slender trocar and canula may be used to evacuate the parts.



The use of the evacuating instrument every few days, until there is a subsidence of the fluid accumulation, is decidedly serviceable. When the trocar is inserted the surgeon should consider the position of the large vessels and nerves that they may escape a lesion. The usual place to make the puncture is a little above and posterior to the great trochanter. Instead of a trocar, a slender bistoury, or tenotome may be employed to make an opening into the joint. Using either instrument the capsular ligament must be punctured, when it has not already been perforated by the morbid processes. After the puncture has been made, the limb may be rotated, especially inwards, to force out the fluid. This having been well done, and the wound covered with the belladonna or aconite plaster to prevent the air from freely passing into the articulation, and keep in check any inflammation that might be excited by the paracentesis. An anæsthetic should be used to obviate the pain. The operation having been performed, the patient is to be replaced in the wire apparatus and retained there constantly until another tapping of the joint is required, or recovery is so far advanced as to render it safe to exercise the limb a little. Under the influence of such local treatment, and the internal exhibition of stimulants, anodynes, arterial sedatives, or tonics, as the symptoms of the case require, the patient will steadily improve. The slight shortening of the limb which is likely to result in many cases, even with a favorable termination, may be remedied by the use of a shoe which has a correspondingly high heel. The stiffness of the limb, which is caused in part by the organization of plastic lymph among the tissues in the vicinity of the joint, and sometimes within the capsular ligament, is in many cases to be let alone, at least until it be ascertained whether the motion of walking diminishes the difficulty. If it do not improve by use, and false bands seem to be the entire impediment, the patient is to be prepared by anæsthesia, and then the limb flexed, extended, abducted, and rotated with sufficient force, of a sudden character, to break up the fibrous adhesions. The patient should then be put in the wire breeches, where he is to remain until all active inflammation has subsided. Passive motion is to be practiced for a few days preceding attempts at walking. So great advantage has been derived in such cases from the rough manipulations of "natural bone setters," in their unscientific endeavors, that the notion is quite prevalent that the reduction of an old dislocation has been affected.



When a very bad case of hip-joint disease is presented for treatment in its advanced stages, several fistulous openings existing, which discharge the products of caries, the patient rapidly sinking in spite of the best management that can be devised, *resection* is the alternative. This severe and dangerous operation should not be resorted to, however, until the internal use of cod-liver oil and the phosphates have been thoroughly tried, as well as such supporting treatment as the peculiar symptoms of the case demand.

The old plan of using leeches and other depleting means, and counter-irritants in the form of plasters, moxas, setons, and cauteries, is falling into merited disrepute. When a derivative agency is used, the common irritating plaster is, in the majority of instances the best, but it has its objections. The actual cautery has been highly extolled, yet it is an unmerciful agency, and often fails to produce any satisfactory benefit.

The long splint, reaching from the axilla to beyond the bottom of the foot, has been employed in connection with extension and counter-extension, with very happy results. A double splint, a piece to go on each side of the body, and connected by a cross piece at the lower end, answers a very admirable purpose. With this the same mechanical principles can be brought to bear, that render the wire apparatus so valuable. The latter, however, is easier to be worn, the counter-extension being so well distributed upon those parts which are used to pressure in sitting.

Before dismissing this subject, it may be well to mention that a patient should not be declared well, and discharged, too early. The tendency to a return or continuation of the disease often exists sometimes after apparent convalescence. The second attack in time subsides, with as much probability of a third, as there was for the preceding. I know a young man who has been through three or four attacks, two or three years coming between each, the patient and the medical attendant congratulating themselves as many times upon the prospect of recovery. This tendency to relapse seems to be favored by a scrofulous condition of the tissues about the joint. In one case where a third attack threatened, severe symptoms were obviated by the administration of chalybeates, and large doses of the phosphate of lime, together with the arnica plaster applied to the parts covering the articulation. It is essential that the patient's bowels be kept open with laxatives, both during the cure, and afterwards, as a preventive of a subsequent attack of the disease.

EDITORIAL DEPARTMENT.

DRINKS FOR THE SICK.

All on whom the care of the sick devolves, whether in the capacity of physician or nurse, appear to be fully conscious of the value of medicine in their treatment. And in the matter of food, the most minute enquries are often made, and the most minute directions are given,– not, however, in every instance, with much apparent knowledge of diatetics; while in regard to the important matter of *beverages* a degree of inattention or indifference often obtains, which to any observant person appears very strange, and almost unaccountable.

In health, and with those beyond the age of infancy, the absence of liquids, as drinks or in combination with the food, even for a few hours at a time, causes such suffering as to make the demand for them imperative. The need for them and their value in the aid of the proper play of the physiological functions, are patent to all educated physiologists; but their proper regulation and administration to those who are sick, have not at all times been fully perceived and acted upon.

Usually in disease, whether acute or chronic, the processes of *elimination*, through the lungs, the kidneys, and skin, require to be aided, or at least to be kept free from obstruction; and a proper supply of fluid of the requisite character and condition, will often do as much as medicine, and frequently far more than solid medicine, to accomplish these ends.

The natural food of infants contains enough of the constituents of water and other matters in a fluid form to subserve the purposes of drink as well as food, and doubtless but little liquid, as *drink*, simply, is required by the infant in a state of complete health, and while the surrounding atmosphere is at a proper temperature. But when sickness occurs, and the powers of digestion and assimilation of the infant are weakened by disease, there can be no doubt that the sense of thirst very often leads the little patient to nurse, when the food of the milk is not needed and must prove quite harmful.

During any, even slight illness,—if accompanied by a febrile condition,—and during the heat of summer, water, pure cold water, should always be offered to an infant, however young, before it is allowed to nurse. If it is not *thirsty* it will have no relish for the water and will not drink of it, but will partake of the required amount. *as food*, of the natural food, but not nurse the mother's milk merely to satisfy thirst when the nourishment contained therein cannot be digested and assimilated.

Without doubt, cholera infantum and other diseases of the digestive organs of infants, are not seldom caused by the child taking milk into its stomach to satisfy thirst produced by the heat of the season, when the temperature of the weather has rendered the organs of digestion less active than usual, but it has provoked the sensation of thirst by increasing the demand for drink.

Children laboring under disease, like adults, often can digest but a small quantity of food, while their condition causes an increase of thirst. But many nurses and some physicians do not appreciate the harm produced by over-loading the weak stomach with milk, as well as the neglect of the proper administration of drink. The presence of food causes harm by its presence, and also by taking the place of the required drink, and thus the infant suffers in two ways, and from two causes not allowed to act upon older patients.

We are fully assured that the importance of giving fluids merely as drinks to children, both in health and during disease, has not been appreciated even by the profession, and hope the hints here presented will not be passed by without thought and consideration.

But we proposed in penning this article, to call particular attention to drinks in the treatment of the *sick*—and especially in warm climates and in the warm seasons of the year.

Many suppose that *medicine*,—and medicine of an active, notable potency, such as will *remove* the disease by its observable activity, in the form of "Bull-dog Pills," "Thomsonian Emetics," or other pertubative impressions, are necessary to perform a cure; and hence give their main attention to the administration of such agencies. Such treatment may be demanded, but never to the neglect of those milder but more permanent influences which make a continuous and permanent impression upon the system of the patient; and the skill of the physician will often be as much manifested, and his success will as much depend upon the proper management of these less obtrusive measures as upon the *medicine* administered.

The use of water, and in summer of *cold* water, by patients laboring under all forms of disease, to the full extent of satisfying and quenching thirst, is now so common as to cause but little remark. Such, however, was not the fact but a few years since. Pure cold water in small quantities and often repeated, will seldom do any harm, and only where the stomach or other portions of the alimentary canal are diseased, will its administration require any special care further than to supply the want of the patient.

As water readily passes through the coats of the stomach and the blood vessels, its use greatly aids in the elimination of such effete or harmful substances as are present in the system, and produce, or are produced by the disease. The water, itself, is one of the best, although not the most powerful *solvent* known; and thus not only serves to dilute and wash away the dissolved effete matter, but itself changes the dead and effete solid and semi-solid matters into fluids, and renders them capable of elimination. In febrile and inflammatory diseases, the living tissues and structures are rapidly destroyed, and hence the great need of solvents and water to fit and aid those dead atoms in the processes of elimination. The feeling of thirst present in such diseases is indicative of the needs of the system, and should be gratified.

But other matters in addition to water, may be introduced into the system along with the drinks. The articles by Prof. Cleaveland, in late numbers of the College Journal in regard to the therapeutic applications of Alkalies and Acids, are of value in this connection. Nearly all the uses they subserve, can with more certainty be realized if they are first dissolved in fluid and administered in the form of beverages. In that form they are well fitted for use, and readily find their way to all parts of the system without acting too violently upon any organ or tissue.

Acidulated drinks are in almost constant demand in most forms of acute disease, especially where the febrile or inflammatory action has been somewhat severe, and has continued two or more days. In regard to their uses, and their mode of operation, we would refer our readers to the article, "Acids" already spoken of.

Water may be made acid by the addition of citric acid, lemon juice, creamor tartar, tartaric acid, the berries of the sumac tree, acid fruits, etc. With those who relish it, sour butter-milk is often an admirable article, serving the purposes of both food and drink.

Alkaline drinks may be prepared by dissolving a little soda, or potassa, or other alkali in the beverage used; but, except in certain forms of disease, as in gout, rheumatism, and dropsy, great caution is requisite in the use of alkaline drinks. The alkalies are quite powerful solvents, and may render the blood too watery, and the solids and semi-solids soft and easily broken down, before the physician or patient is aware of the danger. Even the mildest form of alkaline drinks, the natural water of the limestone regions, almost invariably proves deleterious to those who are not accustomed to them.

It is erroniously supposed by some, that the beverage sold in the cities under the name of "Soda Water" is alkaline and contains soda. It does not contain a trace of soda, but is truly an *acid* drink, being simply pure water into which *carbonic acid* has been forced by pressure. Its constant and increasing use is an illustration of the value of *acid*, not alkaline drinks, even to those in health, during the warm season.

Alcoholic drinks are sometimes used in sickness, as wine, ale, beer, cordial, etc., but it may well be doubted if such preparations owe their efficacy to the *alcohol* entering into them as much as the other ingredients. Some of them contain acids, nutrients, antiseptics, tonics, and sedatives in addition to alcohol and water, and those agents serve no unimportant uses in the economy. But without attempting to explain as to what particular ingredient they owe their efficacy, there can be no hesitancy in admitting that these bevarages often make a favorable impression upon the sick, such as no other form of medication has attained.

Nutrient drinks in the form of toast-water, milk, beef-tea, gruel, soup, and various other preparations, supply the needed aliment in a form to pass directly through the coats of the stomach into the general circulation. As they thus relieve the organs of digestion of the usual labor demanded to prepare solid food for the purposes of nutrition, they are of peculiar value in debility and derangement of the stomach and intestines, whether such derangement is the result of a primary affection of the digestive apparatus, or the result of some local or general disease. By means of drinks, the system can be supplied with nutriment, even if the stomach is greatly deranged, and these forms of beverage should never be neglected. They are of peculiar value in enteric fever, diarrhœa, and dysentery.

Shielding drinks are also of very great value in disease of the stomach and intestines. Flax seed, gum Arabic, slippery elm, prickly pear, and other mucilaginous articles, have been so often and for such a length of time made use of in the sick chamber, that nothing more than an allusion to them would be necessary, were it not for the too common practice for the nurse to prepare them with too much of the shielding agent, to the amount of water used. They should never be prepared with so much of the medicine as to have a *ropy* appearance when lifted on a spoon. Very seldom does the nurse appear to understand the simple process of preparing gum, flax-seed, or slippery elm, water. It should also be freshly made three or four times in the twenty-four hours, and during hot weather kept cool by being surrounded with ice or a cloth constantly wet.

Many times the patient is made worse by having forced into his feeble stomach, rancid, or *ancient*, flax-seed or gum water. The physician should pay special attention to this matter, and give minute and positive directions in regard to the preparation and use of shielding drinks. The frequent use of flax-seed in their preparation should be discouraged, as it quite readily changes on exposure, and is less pleasant to the patient than either gum, or slippery elm bark.

Aromatic drinks are far too seldom ordered by physicians. They possess decidedly antiseptic properties, and hence are of value in fevers and inflammations, as well as in diarrhœa and dysentery. They are slightly stimulating, and hence rouse the torpid or enfeebled stomach. They are admirable agents for relieving nausea or depression of the stomach, preventing the changes in the contents or walls of the alimentary canal which lead to the evolution of acids or gas. Infusions of balm, mint, sage, and other aromatic plants, barks or roots, are often very grateful to the patient and very useful remedial agents.

Nervines of various kinds, and especially infusions of valerian, cypripedium, clematis, and scullcap, are in very common use in domestic practice. As possessed of both sedative and *tonic* power, an infusion of scutellaria, peach-leaves, or wild cherry-bark, will be found of great utility in most febrile derangements, particularly with a tendency to putridity.

Tonic, *astringent*, *diaphoretic*, *diuretic*, *laxative*, and other drinks, will readily suggest themselves to the reader. And when we remember that medicines in minute sub-divisions, take into the system with water as in drinks, are readily and speedily carried, *undigested* and unchanged, to remote structures, so that the organs are quickly placed under their influence; and that they can thus be renewed as fast as eliminated; we must admit that drinks should by no means be overlooked in our care for the sick; but if properly managed, may be made to produce powerful and desirable impressions on the organism, only second to, and frequently of more value than the impressions made by medicines administered in other forms.

BOOK NOTICES.

Elements of Medicine; a Compendious view of Pathology and Therapeutics; or the History and Treatment of Diseases. By SAMUEL HENRY DICKSON, M. D., L.L. D. Second Edition, revised. Blanchard and Lea, Philadelphia, 1859.

THIS work, as we are informed in the Preface, is intended as an aid to young men who have engaged in the study of medicine, to physicians who have recently assumed the responsibilities of practice, and to the professors who are engaged in teaching; and contains intrinsic evidence of an effort to adapt it to such purposes by the simplicity of its arrangement and the brevity of its style. It is divided into two parts, and the subjects are taken up in the following order:

Part I. General Pathology. §1. The Nature of Disease. §2. Etiology. § 3. The Seats of Disease. § 4. The Phenomena of Disease. § 5. The Tendency of Disease.

Part II. Special Pathology and Therapeutics. § 1. Diseases of the Circulatory System, viz; Idiopathic Fevers; Symptomatic Fever, Cardial Affections; Angina pectoris; Hæmorrhages; Hydrops; Scrofula; Tuberculosis. § 2. Diseases of the Digestive System; of the Stomach and Intestines; of the Collatitious Viscera, (i. e.) Liver, Spleen, Pancreas etc. § 3. Diseases of the Respiratory System; § 4. Diseases of the Sensorial System. § 5. Diseases of the Motory System. § 6. Diseases of the Excernent System.

Having thus given an epitome of the contents of the work, we might with propriety leave the reader to judge whether from the reputation of the author and the scope of his work, it is probably such a book as he would desire to consult. We will remark, however, that Dr. D. adheres with considerable tenacity to the formulæ of "old physic" in the treatment of diseases, but evidently feels the influence of that progressive spirit which is gradually but surely modifying the views and practice of the entire profession. This is evinced by the frequent introduction of arguments and authorities to justify the use of mercurial medicines and the lancet. In very few instances are these agents boldly advised, without such an attempt at justification as amounts to something like an apology for their introduction. Let an example suffice to illustrate our meaning. Speaking of bilious remittent fever he says:

"The mercurial treatment so much and unreasonably denounced by some, and so sadly misused and abused by many, becomes occasionally a cause of reasonable preference or absolute necessity. * * * I will not deny that ptyalism, when fully established, which however is not often necessary, is in itself a state of troublesome and annoying disease. I will not utter a word in favor of the calamity. It is an evil undoubtedly, but of evils, when forced upon us, it is rational to choose the least, and this is surely preferable to the continuance of a bilious remittent of the serious character I have described, as an alternative. * * The evils acknowledged, however, to arise, not merely from the abuse, but sometimes even from the judicious use of mercury, though prodigiously exaggerated, yet afford fair ground for another set of objections which deserve impartial consideration. Of course, the resort to it must not be made in slight attacks, nor unless the case is of so serious a nature, and implies so much danger to the patient's life, or future health and comfort, as to justify us in subjecting him to the annoyance of a tormenting sore mouth, with the chance of more or less injury to his teeth and their alveolar sockets, and the extension of inflammation and gangrene. These malignant influences of the mercurial are most likely to be developed in the very young, and children, and in this class of patients I should feel much reluctance to depend upon it."

Notwithstanding the brevity aimed at by the author, it is remarkable how much space is occupied by apologetic argumentation, similar to the above, in reference both to mercurials and venesection. Does not this show, that if the mind of the author could be once liberated from the bias of early education, and be convinced that the necessity for their use in any case is imaginary, he would be ready with us to lay them aside altogether.

But we cannot occupy more space with this notice. Upon the whole, we are pleased with this work; and the mechanical execution is as nearly faultless as that of any book we have recently inspected.

***A Dictionary of Practical Medicine*:** comprising general Pathology, the Nature and Treatment of Diseases, Morbid Structures, and the diseases especially incidental to Climate, to the Sex, and to the different epochs of life. With numerous Prescriptions for the medicines recommended. A Classification of Diseases according to pathological principles A copious Bibliography with references; and an Appendix of approved formulæ The whole forming a library of Pathological and Practical Medicine, and a digest of Medical Literature. By JAMES COPLAND, M. D., F R S., etc. Edited, with additions by CHARLES A. LEE, A. M., M. D, etc. In three Volumes, pages, 4,070. New York: Harper and Brothers, 1855 and 1859.

A copy of the large work above named has been sent us by the publishers, through the house of Rickey, Mallory and Co., of this city. It affords us pleasure to be able to announce that this valuable Dictionary has at last been completed; and that it is a monument worthy the labors of a great man. The articles are very elaborate, and taken separately, would form very respectable monographs, upon the leading subjects connected with and involved in practical medicine. Although the book would appear to have been as complete as could be required upon its leaving the Author's hands, we find that the talented American Editor has found a large quantity of matter which he has with obvious propriety added—thus Americanizing the work, by adding the result of home practice as shadowed forth in the medical literature of the United States.

A fine feature in the work is the Bibliographical references appended to each article, thus directing the reader's attention to most of the more prominent articles published upon each respective subject, either in Europe, Great Britain or the United States, so that while it professes to be a digest of all that is important in medical literature bearing upon practical medicine, it at the same time suggests to the industrious student a vast field for investigation, and aids him in its examination, by indicating where to make his inquiries.

The work will undoubtedly well repay the purchaser for it will furnish him with much valuable information not to be procured in a less extended treatise.

Report of the Superintendant of the Coast Survey, showing the Progress of the Survey, during the year 1857. From Prof. A. D. BACHE, Washington, 1858.

ON submitting this ponderous volume to one who delights in mathematics and star-gazing, we were told:—*First*, That the Coast Survey costs a mint of money annually. And, *Secondly*, That there were *two* Tables of some value to navigators, in the present volume. With the possession of these two valuable items of information, we shall submit the Survey, and its Report to Mr. Wells, and his Double Annual of Scientific Discovery.

Urinary Deposits. Their Diagnosis, Pathology and Therapeutical Indications. By GOLDING BIRD, M. D., F. R. S. Edited by EDWARD LLOYD BIRKETT, M. D., etc., etc. A new American, from the Fifth London Edition. With Eighty Illustrations on wood. Philadelphia: Blanchard & Lea, 1859.

EVER since the first edition of Golding Bird's work was published, the profession have felt that a philosopher and teacher had presented some of the most valued truths developed by modern science and research; and as each succeeding edition of it has appeared, it has been looked to as the embodiment of all that has actually become *established* in regard to this branch of medical science.

Since the death of this great man, it was been feared that the branch of medical science to which he had devoted the most of his thought and attention, would feel his loss, and perhaps be retarded in its progress from the want of his labors and research. But there have been others to take his place; and the contributions of Clark, Day, Lehmann, Hassall, Letherby, Johnson, Pavy, Garrod, and others in Great Britan, and a host in Germany, have done very much to push the investigations far beyond the point attained even by Golding Bird himself.

The microscope, too, has lent its almost magical power to add to our knowledge beyond what it would be possible without its assistance, and to correct errors which could not be detected without its use.

The Editor of this edition, Dr. Birkett, has not failed to keep well informed in regard to all these various contributions of science, and has carefully incorporated them into the text of the work, or thrown them into Notes, as he thought would best subserve the interests of his readers. As now offered the profession, it must prove eminently satisfactory and valuable.

◆

Memoirs of the Life and Services of Daniel Drake, M. D., Physician, Professor, and Author. With notices of the Early Settlement of Cincinnati, and some of its Pioneer Citizens. By Edward D. Mansfield, LL.D. Cincinnati: Applegate & Co. 1855.

After near four years, the Publishers have furnished us a copy of Mansfield's Life of Dr. Drake, for notice. And while we accord to the Author many of the more necessary merits of authorship, and among them, doubtless, an earnest desire for exact truth and accuracy in his statements, we feel true regret that this Life was not written by one entirely unbiased by personal feelings, and one also *of the profession*, and hence better capable of writing the memoirs of a man whose active life and career was peculiarly professional.

As a book *for the people*, it will prove useful and generally acceptable.

◆

A Manual of Elementary Chemistry, Theoretical and Practical. By George Fownes, F. R. S., etc. From the Seventh Revised and corrected London Edition. Edited by Ro ert Bridges, M. D. Philadelphia: Blanchard and Lea, 1859.

This excellent manual of scientific and practical chemistry has again passed through the press and comes to us enriched by many new facts not included in the former editions. This is especially the case in the *organic* department. We are also glad to notice an improvement in that portion of the work devoted to non-metalic bodies, in the introduction of symbols, thus aiding materially the student in his efforts to unravel the mysteries of chemical reactions. The present edition of *Fownes* cannot but add to the reputation acquired by its predecessors.

◆

Women: her Diseases and Remedies. A series of letters to his Class. By Charles D. Meigs, M. D., etc. Fourth edition, revised and enlarged. Philadelphia: Blanchard and Lea, 1859. From Rickey, Mallory & Co., Cincinnati.

Like the former editions of this work, the matter is offered in the form of letters, thus enabling the author to adopt a familiar style in explaining his views to the reader. Whether this is a preferable mode of presenting subjects in medical science to the profession, is somewhat questionable; yet it is the privilege of every author to write his own way,—and, to the reader, the *matter* is of more importance than the manner. In the treatment of all maladies incident to the female sex, Prof. Meigs has, in this country, a high and well-merited reputation, second to none other; and his works on "Obstetrics," and on "Women and her Diseases," being compends of his views and treatment of these subjects, are much valued as text books by the profession throughout the United States, without regard to sect or party.

Although we cannot subscribe to all of the opinions and medical management laid down by Prof. Meigs in his work before us on the Diseases of Women, yet we find much, very much, of an important and practically useful character to the student, as well as to the more experienced practitioner, beside many suggestions demanding a serious consideration.

In the Preface to the present edition, the author states that he has "introduced many things formerly omitted, and erased others no longer needful to be retained,—also that he has endeavored so to improve the style, and recast many important portions of the work, as to make it more useful and more pleasing to the reader."

◆

An Essay on the Climate and Fevers of the South-western, Southern Atlantic, and Gulf States. By James C. Harris, M D. Wetumpka, Ala.: Reprinted from the New Orleans Medical News and Hospital Gazette, 1858.

This is a laborious, philosophical, and creditable effort to show the influence of climate and topography, on the production and modification of diseases. As an Essay on Fevers, it has little value, and does *not* as we think establish the author's conclusion, "that *Typhoid* fever, as described by Louis, and *Typhus* fever of the British isles, *are the same disease*."

◆

Anatomy—Descriptive and Surgical. By Henry Gray, F. R. S. Lecturer on Anatomy at St. George's Hospital. (Three hundred and sixty-three engravings on wood.) Philadelphia: Blanchard and Lea, 185. *Per* Rickey, Mallory & Co., Cincinnati, O.

Having the London edition of Gray's Anatomy before us, upon receiving the American edition we at once compared the reprint with the original, to see if the work had been faithfully done; and to our agreeable surprise we found the book rëissued in a form more desirable than it originally appeared. The imitation in every respect is quite perfect. In a word, it is a successful reprint.

We intend to commend this work highly—it deserves praise. It is safe to say, that no work on Anatomy was ever issued, in any language, that is to be compared with Gray's. The illustrations, which must have cost several thousand dollars, give the book its principal interest. They are nearly all original, and bear the peculiarity of having the names of the several parts represented, printed on the face of the cut, instead of being described in the usual way, with figures of reference and descriptions below the diagram. By a mere inspection of the pictures, the practitioner, who has long been away from the dissecting room, can refresh his memory upon anatomical and surgical points, that would otherwise require much study. The student will find the book will relieve the tedium of the preparatory course in anatomy. Although the work is more especially anatomical, there is much in it which was particularly designed for the surgeon. We bespeak for Gray's Anatomy a greater sale in America than has ever been attained by any work on the same subject. Its price which is $6.25 bound in cloth, and $7,00 in leather, is greater than has been usually demanded for works of a kindred character, yet the expense of issuing it has been proportionally great. Its price will not obviate its general distribution.

A Compendium of American Literature, Chronologically arranged. With Biographical sketches of the Authors, and selections from their Works on the plan of the authors "Compendium of English Literature," and "Literature of the Nineteenth Century." By Charles D. Cleveland. Stereotyped Edition, Philadelphia: E. C. & J. Biddle, 1859.

This is an exceedingly valuable and popular work, whose character and object is well given in its Title-page. Its merits have already been appreciated by the public; and this *new* and *enlarged* edition will fully sustain its former reputation.

EDITORIAL ABSTRACTS.

Fibrin.—Prof. Joynes of Richmond, Va., in an article on the *Physiological Position of Fibrin*, says:—"It does not appear that fibrin enters into the composition of *any of the living tissues.* Among those who entertain this view may be mentioned, Zimmerman, John Simon, Hanfield Jones, Brown, Segund, Bernard, and Rokitanski, whose authority in the world of science certainly entitles it to a candid and deliberate examination."

Sulphate of Quinia in Puerperal Fever.—Dr. Windle thinks quinia should be used as a prophylactic against puerperal fever, and is of the opinion that its use will prove as satisfactory against this disease as against those caused by miasm.

Stramonium in Dysmenorrhœa.—Dr. Merrill gives a grain of the extract at a dose, once in three hours, for ten days before the menstrual period. A very obstinate case yielded to this treatment in five or six months.

MISCELLANY.

PSYCHOLOGICAL PHENOMENA.

A New Era in Photography.—At the present time, the Artistic world is deeply interested in a new and wonderful improvement in the photographic art just made public by a Mr. Fontayne of this city, a gentleman long and favorably known in connection with photography, and the improvements he has introduced in that art.

All conversant with the art of photography, are aware, that to make a picture on paper, what is technically called a *negative*, a daguerreotype on *glass* is first taken, and the rays of the sun on passing through the glass are obstructed unequally, so that falling upon a paper made chemically impressible by light, the *reverse* of the picture on the glass is developed in the sensitive paper.

By means of Mr. Fontayne's new invention, the rays of light passing through a powerful double convex lens, and through the negative picture on the glass, are concentrated upon the sensitive paper beneath. The paper is made so exceedingly sensitive to the chemical action of light that but a *flash* need to fall upon it to cause the picture on the glass to be reproduced on the paper, and by means of a peculiar arrangement of slides governed in their motion by coiled springs, the light can be admitted and excluded almost *instantaneously* as a new surface of sensitive paper is brought in contact and under the picture on the glass. By this arrangement, photographic pictures can be multiplied with a rapidity governed only by the rapidity of motion given to the machinery. Already they have been made at the rate of *five* or *six thousand* an hour; and by the use of additional negatives, that number can be increased in the ratio of the number of negatives made use of.

To physicians this invention possesses an interest arising from the fact that the *theoretical* ideas on which it is based, were developed while the inventor was confined by sickness, leaving the *mechanical* arrangements only, to be perfected on recovery.

A similar phenomena was observable in connection with the *Auto-*

maton Reaper and Mower, invented a short time since by Mr. Atkins of Illinois. Mr. Atkins had been confined to his room for years, and it is believed had never seen a Reaper or Mower; and yet his ideas were so clear and complete that he was able to make a full and perfect drawing of his machine in all its parts, for its construction; and all in America and Europe, who have seen it in operation, have considered it a *wonderful* as well as perfect mechanical combination.

MOXA.

Centuries ago the Chinese and Egyptians made use of what they denominated a *moxa* to excite counter-irritation. As a remedial agent, the moxa was not much employed until the early part of the present century, when Baron Larrey, in the campaigns of Napoleon, applied it to an extent that every soldier on the sick list anticipated a slight scorching. It is probable, that to day the little old Baron is tottering through the barracks of the Franco-Sardinian army, prescribing his favorite derivative.

The moxa is essentially a cautery. It is made of some combustible material,—commonly of strips of linen or cotton, which are saturated in a solution of the nitrate of potassa, then dried and rolled into cylinders about a fourth of an inch in thickness,—set on fire and kept burning so near the flesh as to char it. Punk may be used instead of rolls of cotton or linen, though to make it burn might require the use of a blow-pipe or bellows. During its application over a deep seated pain, or inflammation, the first degree of heat is rather agreeable than painful; at a little later period the sensation becomes painful, and is gradually increased until it is extremely acute. The patient dreads the first application worst, though few are courageous enough to quietly submit to subsequent scorching, without wincing. According to Larrey, it is best to leave an interval of several days between each application, the revulsive action lasting during that time.

The moxa is reported, by the celebrated surgeon and author referred to, to be useful in amaurosis and incipient cataract, applying it in the region of the orbits, and especially " along the course of the nerves most intimately connected with those of the eye, such as the trunk and principal branches of the facial, those of the superior maxillary, and of the frontal. The excitation imparted to these nervous branches, propagates itself, successively, and extends, at last, to those affected with disease; the morbid condition of which is gradually dissipated, and the vital properties of the diseased organs restored in the same proportion." In diseases of hearing, when the cause seemed to depend upon some difficulty with the nerves in proximity to the ear, though the auditory be not directly affected, the use of the moxa over the course of the branches of the facial nerve, and about the auditory opening, sometimes "restores the function of hearing."

In the treatment of paralysis, the use of the moxa has been extolled as being particularly beneficial. Several remarkable cures are reported after the repeated application of the moxa along the affected side of the back and the extremities. In a few instances, so marked was the effect, that contractions of the muscles took place as strong as though a powerful galvanic battery had been used. In paralysis of the muscles of one side of the face, producing hideous contortions of the features, the moxa has proved serviceable in restoring nervous activity to the parts, and consequently a removal of the deformity.

In treating certain organic diseases, the use of the moxa is claimed to be indicated. Among these may be mentioned asthma, phthisis, gastritis, hepatitis, rachitis, and coxalgia. If a tenth part of all that is said of the agency in the difficulties just enumerated, be reliable; the use of the moxa ought not to be allowed to fall into disrepute. Other agents which exert a similar influence, are now employed in place of the moxa, but whether with more desirable effects, it remains to be shown. In the minds of many judicious physicians of the present day, the use of the cauteries as revulsive agents in deep-seated affections, has been over-estimated.

THE AMERICAN JOURNAL OF DENTAL SCIENCE.

The editor of this Quarterly announces the names of *forty-two* Dentists in Europe and America, each of whom has agreed to contribute one or more articles to its pages, annually.

THE DENTAL REGISTER OF THE WEST.

With the July number, a new volume of this old and well-known Journal commenced. *It is now published each month*, and will be, as it has been, very valuable, both to Dentists and Physicians. The terms are Three Dollars a year.

MARRIED.

On the 23d of June, by Rev. T. H. Hall, Dr. Giles T. Blair, of Westerville, Ohio, to Miss Annette Westervilt, daughter of Peter Westervilt, Esq., of the same place.

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ORIGINAL CONTRIBUTIONS.

ANTIMIASMATICS.

BY PROF. C. H. CLEAVELAND.

Although the term *Antiperiodic* frequently occurs in medical literature; and writers on Practice, and on Materia Medica and Therapeutics are among those by whom the term is most frequently used, such as have their attention specially attracted to the subject, will be astonished at the little definiteness with which it has been applied.

While certain agents are said to be antiperiodics, no one seems to have a very clear idea of *what it is* that constitutes a medicine an antiperiodic, or what force or power is requisite to entitle it to that appellation. It would seem that the words tonic, alterative, and antiperiodic, have generally obtained in medical literature, not because those who use them attach any definite idea to them, but because they serve as a convenient mask to cover up a *want* of definite knowledge, which their use may serve to conceal.

It is perhaps less true of antiperiodics, than of either alteratives or tonics, that the term is *always* used without definite meaning. At one time, if alteratives were advised, the profession uniformly understood the word to indicate small doses of some mercurial preparation, not, perhaps, because it was supposed that mercury was the only alterative, but that it was the alterative *par excellence.* So, at the present time, should an antiperiodic be advised in any given case, most medical men would understand either arsenic, quinia, bereerina, or some other agent which experience has demonstrated as useful in ague. But *what forces* are to be found in those agents in common, which entitle them to be classed together under the common appellation of Antiperiodics, seems not to have been definitely understood by any writer on therapeutics. Indeed, so little distinct and positive knowledge seems to have been obtained in regard to those agents freely styled antiperiodics, that they have not been treated as a distinct class by many; and even Headland, who makes them the Sixth Order of his Second Division, merely says: "Certain mineral medicines of the Catalytic division are employed in the treatment of periodic diseases;" and then proceeds to speak only of arsenic, common salt, and mercury, as having any settled claim to be placed in this class. It is true, he acknowledges that quinia and some other products of the vegetable kingdom, are useful in ague and periodic diseases, but he does not seem to recognise that they are possessed of any catheretic, any true *anti*-miasmatic power. Simon, in common with the great body of the profession, admits that there must be taken into the system, for the developement of ague and other periodic diseases, a well-marked, distinct, and peculiar, deleterious agent or miasm, the *paludal poison*—a product of putrefactive vegetable or animal decomposition—or perhaps of only vegetable putrefactive decomposition; and that it is this specific agent or product which is the cause of the various forms of miasmatic diseases, whether appearing as the true ague, or assuming a remittent or intermittent form of disease; embracing not only the milder form of ague as it appears in temperate climes, but also the deadly miasmatic fevers of the tropics.

I apply the term *Antimiasmatic* to such catheretic agents, as when taken into the circulation, combine with, or otherwise neutralize this miasm and pass with it out of the system.

For the proper understanding of the therapeutical action of the antimiasmatics, it may be necessary to form some definite idea of the deleterious agent they are designed to remove;—and the more so, as some who have addressed the profession, have in strange opposition to the multiplied and continuous experience of the entire profession, seen fit to deny utterly the existence of any such thing as miasm, or any uniform, definite, producing cause of intermittents or ague.

Of the nature of this poison, Simon says: "I may confess that I hardly know whether it ought to be classed with the *morbid* poisons now under consideration," (as small-pox, measles, scarlet-fever, etc.,) "or perhaps rather with the *common* poisons derived from unanimated nature; for it differs from these latter poisons, in its longer period of latency, and in the slowly progressive character of the functional and textural changes which it works in the body: on the other hand, it may be argued that these are minor points of differences, and that in the more essential respects, the paludal poison deserves to be accounted a common one. Where intense, it spares few, and therefore cannot be proved to have those special affinities in the blood which belong to the morbid poisons; it confers no subsequent immunity, and on this account also, cannot be thought to have such relations; it acts in proportion to its dose, which is not the case with morbid poisons; the circumstances rendering it severe are local, (as opposed to personal,) circumstances, for in certain countries it is always immeasurably severer than in others; and lastly, but as I think, most importantly, it does not reproduce and multiply itself in the human body; it cannot convert any element of the blood into its own similitude; nor are its effects capable of propagation from one person to another.

That it is a *material* poison, capable of effecting entry into the blood, and not any mere physical influence inherent in the soil, seems certain; we can trace its operation in a definite line of progress through space, and can observe it becoming arrested by material impediment—by trees, or by a line of buildings; it is soluble, too, for it has difficulty in crossing water—probably from undergoing solution there; heat is its great evolver, watery moisture its chief vehicle. Whether it consists in some complicated organic product, or is of a simpler constitution, I am unable to decide, I incline to the former supposition.

The severer operation of paludal poison, often illustrates, what is true of all poisons acting through the blood, that life may be extingushed by them without evident structural lesions remaining. Dysentery, disease of the liver, spleen, or peritoneum, and the like, arise from minor degrees, and slower operation of the poison. Yellow fever may kill in a few hours, leaving no posthumous sign of local determination. Time will not allow me to enlarge on the symptomatology of malarious diseases. For the sake of our subject generally, I would merely suggest two points for consideration. *First*, that the characteristic remission and recurrence of symptoms in this class of disorders may depend on the alternate exhaustion and reproduction, either of the poison itself, or of that blood-material on which it acts: *Secondly*, that their marked tendency to effect the spleen with chronic enlargement and inflammation, is a peculiarity to which I shall presently again advert, as it suggests some explanation of what is *special* in the disease."

It now seems fully established, that there is a *specific* cause for ague and other miasmatic diseases, which cause is the product of putrefactive, or destructive decomposition, *without* and not *within* the body, as is the source of the specific poisons of small-pox, measles, etc.,—and that the system in a state of health, is capable of eliminating this poison when but a small amount is taken in, so completely that not enough can find lodgement to produce disease.

It is also well known that the common bitter tonics will aid the system in the processes of elimination, by supplying the material for the formation of bile, which is a solvent and catheretic for miasmatic poisons:—or in other words, the taurine of the bile is a true antimiasmatic agent; and as long as the system is supplied with sufficient of the bitter tonic principle to be manufactured into bile, and the liver is capable of preparing enough of the catheretic, this poison cannot accumulate in sufficient quantities in the system to produce morbid manifestations or disease. Hence, the bitter tonics have sometimes been called antiperiodics—but their uniform failure to cure established ague and other forms of periodic disease, clearly demonstrates that a force which does not reside in tonics, is demanded in these diseases,—that tonics are *not* antimiasmatics. The value and office of the bitter tonics have already been considered, (COLLEGE JOURNAL, P. 536, 1858,) and to that article the reader is referred for their elucidation;—but the profession has so uniformly classed the most important of the antimiasmatics among the tonics, that it would appear necessary again, to draw the line of separation between them.

Tonics are *Restorative* medicines, adding an agent to the blood, which is needed;—*First*, to *prevent* putrefactive decomposition from occuring in that fluid, the same as hops prevent the putrefactive decomposition from occuring in the materials of which beer is made; and, *Secondly*, to supply the material out of which the liver can manufacture bile.

Antiperiodics are *Catheretic* medicines, designed to be the destroyers or dissolvers of the miasmatic poison which has found its way into the system, and which does not readily become excreted while retaining its original constitution, but by its presence embarrasses the different organs, producing various forms of disease according to the amount present in the system, the condition of the various organs, and the other circumstances which modify vital force and activity. The antimiasmatics in some way act upon the paludal poison, rendering it powerless; and combining with it, they may together pass out of the system— thus entirely freeing the system from the presence of the *materies morbi.*

It is probable that miasmatic poison is not always eliminated from the system, even after entering into chemical combination with an antimiasmatic. While the chemical union exists, the poison being changed and held in combination with the medicine, cannot do any harm to the organism ; but phenomena are frequently observed which indicate the fact that this union is not always lasting, and that at times, the medicine may cease to be combined with the poison, and *it* be excreted, while the miasmatic poison is left in the system, and may again prove a source of renewed injury. If after investigations establish the correctness of this conjecture, several phenomena that as yet are hidden in uncertainty, will be made clear and patent.

As will be seen from the foregoing explanation, the antimiasmatics can never supply the place of tonics, for they do not either prevent the putrefactive decomposition, or furnish material for making taurine. Neither can tonics supply the place of antimiasmatics, for they possess no power of removing this poison after it has once found lodgement in the blood, only so far as they aid in the formation of taurine, which as has been explained, is a true catheretic.

Antimiasmatics are the true antagonistics of the *cause* of the various miasmatic diseases, or those produced by miasmatic poisons,—the same as an alkali is the true antagonistic for an acid, when the two meet. As potassa would unite with nitric acid either in the stomach or the blood, and form the soluble nitrate of potassa to be excreted by the kidneys, and thus free the system from both the poison and the antidote ;—so does the true antimiasmatic unite with the miasmatic poison, and forming with it a soluble combination, changing the character of the antidote as well as the bane, they usually escape together in the excretions, in a new guise that has heretofore entirely escaped the recognition of the physiological chemist.

That the changes indicated do actually occur, is evidenced by the fact that after the administration of the antimiasmatic medicine, the poison disappears from the system, and the organs have only to recover from the effects that have followed its presence ; and from the fact also, that almost incredible amounts of antimiasmatics have been given with impunity to patients whose systems were charged with this morbid material.

As an illustration of the fact that bodies of matter *do* disappear by combining with some agent already in the blood and escape from the system in a manner that as yet defies our search after it, I here quote from some experiments made by the late Dr. Golding Bird, as recorded in the *Medical Gazette* for June, 1848.

"If any person swallows thirty or forty grains of benzoic acid, it will be absorbed in the blood, and in the capillaries will come in contact with the elements in question; hippuric acid will be generated, and in accordance with the law of all soluble matters in the blood not required for the purpose of nutrition,—filtering off by the kidneys, it will be found readily in the urine. The specimen which I now show you was thus prepared from the urine of a patient to whom I had administered benzoic acid. This contains all the benzoic acid I gave him plus, carbon, hydrogen, nitrogen, and oxygen, in the proportion to form sugar of gelatine. It does not necessarily follow that these elements be always separated in the proportion to form glycocol; if we throw into the system a body which differs in its composition from it in a ratio quite distinct from that of benzoic acid, still the nascent atoms will be seized to form hippuric acid.

The administration of glycocol, to which I have just drawn your attention, affords us another instance of this appropriation of the nascent atoms of exhausted tissues. *This body may be taken in large doses, and yet not a trace will appear in the urine.* It appears to circulate in the blood, and coming in contact with the nascent molecules of carbon, nitrogen, and oxygen, in the proportion to form cyanic acid, uric acid is formed, which appears in the urine, for:—

$$\begin{array}{lll} & \text{1 atom of Glycocol} & = C_4\ H_4\ N_1\ O_3 + \\ = & \text{3 atoms of Cyanic Acid} & = C_9\ \ N_3\ O_3 \\ \cline{3-3} & \text{1 atom of Uric Acid} & = C_{10}\ H_4\ N_4\ O_6, \end{array}$$

the large excess of uric acid which thus is removed from the blood being mixed with, or replaced by, urea, if sufficient oxygen be present."

It is well known that but a very few grains of quinia will produce embarassment and indications of its *harmful* presence, if introduced into the stomach of a well person; that the system will *labor* for its excretion—producing a flush of the face, a labored action of the heart, and other evidences of excitation and embarassment,—clearly proving that the quinia in a *healthy* state of the system is a foreign agent, which the different organs of the body cannot appropriate to any good use; and yet one that cannot readily be got rid of. But let a patient whose vitality is reduced by the presence of miasmatic poison, whose skin, liver, spleen—and in short, whose entire economy performs its functions sluggishly because of the embarassment resulting from the presence of a considerable amount of the poison,—let such a patient take ten, twenty, or sixty grains of quinia, and instead of the debilitated organs finding any difficulty in getting rid of this amount, we often see as it were, that a heavy load has been raised from them almost at once, and they are far more active and powerful than before. In a short time there remains in the system no traces of either the poison or the medicine, and we have as positive evidence that they have united and passed in union out of the system, as we had in the former case of the union of the acid and potassa, only that we have not looked for and have not found the resultant compound in any of the excretions.

The same results follow the administration of the antimiasmatics in cases where the amount of the poison has not accumulated in the system to produce manifest disease; for ample experience has proved that very large amounts of quinia and other agents of this order, can be taken by residents of miasmatic districts, even when apparently well—as compared with the amount that could be taken with impunity by one not a resident of such a region.

The profession have of late had their former opinions greatly modified in regard to the use of the vegetable antiperiodics in fevers of miasmatic origin; but even now many who would not hesitate to prescribe five or ten grains of quinia twice or thrice a day, for ague, would deem it rank folly to give a similar quantity repeated each hour, when the amount of poison in the system was so great as to keep up a *continued* morbid manifestation. They apparently overlook the fact, that only so fast as the morbid cause is neutralized, or removed from the system, can the patient rally from its effects. They, also, apparently do not comprehend how it is possible that the *same* morbid material in the system, even in varying quantities, *can* be the cause of diseases manifesting themselves in such various symptoms; and hence the question is often gravely discussed, if these medicines *can* do good, in any fevers except those having manifest periodicity. But, should it be proved that any or all the antimiasmatics are true catheretics to the cause of ague, that fact would not go to establish the idea that they could not also prove catheretic to other morbid matter in the system; as for instance, those present in pneumonia, or acute rheumatism, or puerperal fever. And whether the *materies morbi* be the same, or otherwise, in these difficult diseases, it would seem like folly, to deny, as many have done, the safety of administering large doses of antimiasmatics, simply because their action has not heretofore been understood, or their mode of passing from the system made plain.

It is not necessary, that two agents should act precisely alike upon the poison in preparing it for elimination, to entitle them to be classed together; and, hence, those whose actions on the system differ in many important particulars, may, provided they aid the eliminative process *by acting upon the morbific material so as to render it more easily excreted*, be fully entitled to be ranked together in this Order.

I would by no means wish to convey the idea that arsenic and quinia act in the same identical manner upon the miasmatic poison, or upon the system generally; or that they will not act upon anything else when the poison is present; but the remarkable chemical similitude to each other between the best established antimiasmatics of vegetable origin, as well as their similitude to the taurine of the bile, is strong evidence that *these* agents *do* act in an identical manner upon the poison. The peculiar chemical character of these agents indicates the chemical action which follows their administration; which, although not perhaps fully understood at present, must throw a flood of light upon therapeutics, and guide with certainty in the use of this Order of agents.

Not only have these vegetable antimiasmatics proved extremely valuable in removing the poison after it has so accumulated as to produce disease, but they have also proved of equal value as *prophylactics*,—as we suppose, by removing the morbid material from the system so as to *prevent* such an accumulation as will produce disease. The prophylactic power of bark and quinia, to prevent ague and analogous diseases, long since induced the Government of Great Britian, in the 9th article of the Surgeon's Instructions, to enjoin that when men were to be sent on shore in tropical climates to procure wood and water or on other laborious duties, the surgeon was to recommend to each man previously to his leaving the ship in the morning, to take a drachm of powdered bark in half a gill of wine, and the like quantity of wine after drinking the mixture; or if there be no wine on board, one eighth of a gill of spirits, mixed with the fourth of a gill of water was to be used in lieu of it; and the same proportion of each in the evening, on the men's return to the ship.

This practice was very uniformly observed by some ships, and with the most happy results; but in other ships it was so frequently neglected or so often failed, either because the bark was worthless, or from some unknown cause, that many intelligent medical officers lost all faith in it. Yet there were occasionally cases occurring which proved that its protective influence could not be disputed.

In the Report on the African Station, p. 49, it is stated that twenty men and one officer were employed on shore for one day, at Sierra Leone;—to the former, bark mixed with wine was given, but the latter refused to take it. He was the only person of the whole party who was subsequently attacked with the fever. On page 218 of the same Report, we are told that two boats' crews were detached from the Hydra to examine the river Sherba. They remained away a fortnight, and during the whole time took bark and wine as directed by the instructions; yet, though the locality is a most dangerous one, not one case of fever followed: but another boat's crew, who were absent for only two days in the same locality, and at the same time, who did not take bark, were all attacked except the officer in command of the boat.

Dr. Bryson, who was attached to the Naval service, and became convinced, both that the bark had never been fairly tried, and also that the antimiasmatic principle was a prophylactic against miasmatic poisons, in a Report on the African Station, in 1847, suggested that quinia should be given in a manner somewhat different from that by which the bark was administered; but with a similar design. His plan was to make a strong spirituous solution of amorphus quinia, (quinidia,) mixed with several pipes of wine, in the proportion of four grains of the salt to a fluid ounce of the wine. This wine put in bottles and in appropriate cases, was supplied to each cruiser on the African Station. Dr. J. Walsh writes:—"I found the bark and rum given to the men going away on duty of the greatest benefit; but from the bulk of the bark and the small quantity of the rum, if the men were not watched closely they would not take the draught at all. All that could be desired is now obtained in the medicated mine."

The power of quinia to prevent the accumulation of the paludal poison in the system, thus acting as a prophylactic for all miasmatic diseases, was fully established in the use of this medicated wine. At the present, I shall occupy space only to quote from Dr. Bryson, as published in the *Medical Times and Gazette*, Jan. 6, 1854. He says; "Among the reports received from the African coast, there are few which mention the failure of quinia-wine as a preventive of fever; but by far the greater number affirm, that already it has been of most essential service, especially when administered according to the instructions; and that it should invariably prove effective against long-continued exposure in open boats, by night and day, amid effluvia arising from the rotting slime of a mangrove swamp, is surely more than ought to be expected. There are bounds or limits to most things in this world of ours, at least so we are led to believe. The failure of quinia, therefore, in cases similar to the above, particularly if accompanied by inebriation, need not excite astonishment. But, after all, on carefully examining the reports which mention its failure, it appears that, with hardly an exception, there was some error committed in administering the medicated wine; it was either not given in sufficiently large doses during the exposure to miasmata, or its use was discontinued long before the incubative period of the fever had expired; and though it was supposed to have failed, or to have been only partially effective, it is nevertheless admitted, that the fevers which took place were far less severe and less fatal than usually happens when no quinia had been administered.

One remarkable fact remains to be stated. By an interesting and ably drawn up report from Dr. Burton, the surgeon of the flag-ship on the African station, it appears that the number of deaths among Europeans in the squadron has for several years been gradually diminishing, until it has come down to an equality with that observed on more healthy stations. During the preceding year, the ratio of deaths from disease to the 1000 of mean force, only amounted to 69."

Other antimiasmatic medicines have been considered to possess valuable prophylactic power against the paludal poison, and no doubt they will be found in some regards to be of equal value with quinia. Antimiasmatic medicines of a mineral origin, as they differ in their chemical action from the vegetable antimiasmatics, require a separate explaination as to their *modus operandi*, but I shall reserve that for future consideration.

At present I need but to point to the fact that many diseases which doubtless are of a similar miasmatic origin with ague, and yet are *too severe and continuous* in their morbid manifestations to "take on periodicity," to show the error calling this Order of medicines by their common name of *antiperiodics*.

Periodicity is not a symptom of any peculiar class of diseases—of diseases with either a similitude of originating cause, or of pathological condition; disease of very diverse cause, and nearly opposite condition will yet have remissions and exacerbations. Nay, periodicity is far more frequently met with in *health* than in disease;—at least with *regular* recurrence of the periods; and hence cannot with as much propriety be considered an indication of *disease* as it can of health; and to name an *Order* of medicines Antiperiodics, merely because they have been found useful in some diseases which are periodic in their manifestations at times, has tended greatly to limit the use of medicines of this order.

Antimiasmatics have proved themselves of value in all forms of disease which results from the decomposition of vegetable and animal matter.

As decomposition and the formation of miasmatic gases, takes place with great rapidity when animal and vegetable matters are exposed to moisture and a high degree of temperature,—what have been technically called *miasmatic*, or *malarial* diseases, are more frequently met with on sea or river borders, and swamps, in or near the tropics, where the accumulations together with the heat and moisture, are favorable to rapid decomposition, than elsewhere.

But decomposition takes place *within* the human body; and in certain conditions of the system and forms of disease the products of such decompositions become dangerous disease-producing agents. Quinia and its kindred medicines have been proved to be of great potency in such diseases. In rheumatism, pulmonitis, typhoid and typhus, and in short all kinds of fever; and in local inflammations, where the morbid products of the inflammation are absorbed into the general circulation, these agents, properly managed, must always be found of value.

As the antimiasmatics have been called *antiperiodics*, the querie has sometimes been presented: "Can they be of use in any disease where *periodicity* is not manifested? As well might we say of cold water: It is useful as a drink in ague,—can *it* be useful where periodicity is not manifested? That a Class or Order of medicines is useful when remissions do present themselves, is no proof that they are *not* useful in other forms of disease. As the term *antiperiodic*, as applied to an Order of medicines, as shown, has misled, and limited their use, I prefer not to use it.

GONORRHŒA.

BY A. B. JACKSON, M. D.

In the first Number of Vol. III. of the College Journal, is an article by me, on the origin of syphilis. I then attempted to show that diseases of a venereal character were almost coequal with the human race; and that such maladies may arise *de novo* when the requisite influences are favorable. It is there inferred, from the fact that the disease is found among isolated people, and at remote periods of time, that the affection may have had a multiplicity of origins; therefore, were every vestige of the disease banished from the world, there is reason to believe it would make its appearance again at no very distant day.

In the article above referred to, occurs the following sentence:—"It is now pretty well established that a urethral inflammation caused by the local application of some powerful irritant, like the liquor ammoniæ, is attended with the secretio nof matter that possesses virulent and contagious properties, and is, to all appearances, identical with gonorrhœal pus." I have seen no reason to modify this doctrine in the succeeding year and a half, but have met with one case which goes to support it. A man who suffered with a gleet, which had existed for several years, was told by his physician that he never would be cured of it until he caught gonorrhœa again. The patient was unwilling to contract the disease afresh, as it had already caused him a great deal of trouble. The doctor then told him that a profuse discharge from the urethra produced by the injection of an irritant, would be as effectual; and excited the desired inflammation by injecting a caustic solution. In a day or two the patient had violent urethritis, with chordee, irritable bladder, frequent erections, and a profuse purulent discharge. The doctor then ordered his ordinary treatment for gonorrhœa, but before the difficulty had existed many days the patient's wife had an acute attack of vaginitis which differed in no particular from a gonorrhœal inflammation. The physician consulted me concerning the affair, and seemed surprised to hear me declare that a urethritis or vaginitis attended with the secretion of contagious pus, could be excited at any time without the intervention of sexual contact. I called his attention to the fact that little girls having vaginitis which could not have been venereal, would sometimes be taken with purulent ophthalmia, the origin of which could not be accounted for satisfactorily, except on the ground of a contagious virus having been accidentally transferred from the one region of the body to the other. How a "specific" gonorrhœal virus differs from that of a contagious character, I am unable to say. Both may be propagated on the same membranes, though the specific inflammation is generally more severe and obstinate, than the simply purulent or contagious.

I contend, furthermore, that gonorrhœa is a local disease, and cannot become systemic or constitutional, in the true sense of these terms. Any local difficulty may excite sympathetic constitutional symptoms without in the least contaminating the blood, and eventually effect all the tissues of the body. Syphilis does that; but gonorrhœa, never. A gonorrhœal rheumatism is sometimes spoken of, yet an ophthalmic or a catarrhal rheumatism would be just as indefinite. A man can have a constitutional fracture as well as he can have a constitutional gonorrhœa. I feel like making an apology to the majority of my readers for introducing such generally admitted views, yet it is done for the benefit of those who have imbibed old notions, believing them to be true. principally because they were written by men once standing high in the profession, and have gotten into print. It is not a little astonishing that so great a man as John Hunter should have held to the doctrine that gonorrhœa and syphilis are identical; that gonorrhœa was but a milder form of venereal, and if let alone, would mature into genuine syphilis. The naturalist would not commit a greater blunder were he to assert that a mouse, if allowed to live long enough, would grow up into a rat, or that a turnip would eventually become a cabbage.

Syphilis becomes hereditary; gonorrhœa does not. The latter cannot produce loathsome affections of the bones, nor ulcerations, nor eruptions. The principal similarity between the two diseases, lies in the circumstance that both affections are communicated from one individual to another by coition, and, consequently, spread by promiscuous sexual intercourse. Both may excite buboes, yet the syphilitic usually suppurate, while the gonorrhœal scarcely ever. It must be borne in mind, however, that the two diseases may be taken at the same time, both maturing together; or the virus of the one lying inactive until the other has developed the mature disease. Again, the one poison may be taken at a coition subsequent to that during which the other was received. Then, too, a chancre concealed within the urethra or vagina; or the reception of the disease in the constitutional form, will account for systemic symptoms in those supposed to have only gonorrhœa. It is only by bearing these points in mind, that the inexperienced in venereal disease can make these seeming contradictions harmonize.

The term gonorrhœa, which is the most common name for the disease in question among American physicians, comes from two Greek words, which signify a seminal flow. Probably the ancient writers did not know the difference between spermatorrhœa and gonorrhœa; but certain it is that very little similarity exists between them. The discharge of a gonorrhœa is thrown off from the inflamed mucous surface, as that of the urethra, or of the vagina; while a seminal flow is the product of glandular secretion. As long, however, as every body understands to what disease the term gonorrhœa is applied, there is no necessity for a change. Blennorrhœa is used to designate the malady, yet, as it means a mucous flow, the fault is not remedied. The vulgar call the disease *clap*. That term is of French origin, coming from *clapier*, to conceal; or *clapises*, a kind of brothel.

Early peculiarities of the disease.—From two to eight days,—more definitely, from three to five days,—after a suspicious or impure sexual contact, there will be experienced a positive sensation along the urethra which is rather grateful than otherwise; this is succeeded in the course of the day by itching about the meatus and glans penis, with more than ordinary turgescence of the organ. A slight glairy discharge may next be noticed, and the urine, when passed, seems unusually warm, or hot. All these symptoms may follow the irritation that is frequently excited by intercourse just preceding or following the menstrual flow; or by some impurity, or peculiar incompatibility of the female. The evidence of gonorrhœa in the male is more positive than that already brought forward. If the symptoms recounted be those of clap, it will not be long after they appear, before the lips of the meatus urinarius will pout and look unusually red. There will be a purulent discharge from the urethra, a distressing scalding of urine, and almost constant priapism. By the end of another day there will be effused into the spongy structure immediately surrounding the urethra, plastic lymph, which prevents what is so necessary to perfect erection, the ordinary elongation and distention of that part of the penis. This plastic effusion taking place when the organ is flaccid, renders the urethra and the corpus spongiosum, as tense as the string to a bow, bending the extremity of the penis downwards, and producing a very distressing complication, which is denominated *chordee*, a word coming from the Latin *corda* a string. Chordee is not certain to attend gonorrhœa, yet it complicates almost every severe case. Its absence is the exception.

The prepuce having a lining which is continuous with that of the urethra, is almost always inflamed in gonorrhœa, and sometimes becomes so much thickened and contracted, as to prevent a retraction of it in attempts to uncover the glans penis. This impediment constitutes a difficulty called *phymosis;* and its antitithesis *paraphymosis*, which means a state of the parts which prevents the prepuce being replaced after having been carelessly left in folds behind the corona glandis, is another complication. As the disease progresses the discharge from the urethra will become somewhat thicker, and take on a greenish hue. The linen covering the genitals will get not only stained with the most fluid parts of the discharge, but thickened as if stiff wheat-flour paste had been spread upon its inner side, or cold tallow rubbed upon the cloth. At this time, if he has not done so before, the patient either lays his case before a physician, or consults some friend who is supposed to know something of the complaint. From a disposition to conceal an indiscretion and its result, the patient frequently commits an error he in time regrets more than the original; he avails himself of the first prescription he can find, that has been used in the treatment of venereal disease, blindly confiding in a drug that may prove highly injurious. These "*receipts*," as the non-professional call them, generally indicate some copaiba mixture to be taken internally, and a "wash" of sulphate of zinc, acetate of lead, or nitrate of silver. These remedies are used most indiscreetly. The copaiba is swallowed on the plan that if a little is good, much is better. The scalding of urine at length becomes more tolerable, but the discharge is profuse and disgusting. To arrest the purulent flow is now the strong desire of the patient. He has by this time learned that alum, white vitriol, and sugar of lead are used in solution, for injections. So, on the principle, if little is good, much is better, he uses very strong injections, and succeeds temporarily in diminishing the discharge. But a more serious set of ills now seizes upon the wretched patient. Either a swelled testicle, or an inflamed knee is the consequence of the rash treatment. This unskilful method of treating gonorrhœa is rehearsed for the benefit—not of patients, into whose hands it will not fall—but of such practitioners as prescribe copaiba, zinc, lead, and silver, as though these agents were "specifics" in the cure of the disease. That patient is to be pitied who is unfortunate enough to be a victim to such practice.

The patient having exhausted his early hopes of a private cure, now seeks medical advice. He does not generally resort to the physician in whom he has most confidence, but to some advertising sharper, whose skill is best exhibited in drawing "flats" into his toils. The unsophisticated and confiding patient supposes because Doctor (?) X, Y, or Z, with a venerable head beside his advertisement, professes to give his entire attention to the cure (?) of private diseases, that the regular profession know little about such difficulties. The sharper announces that he can cure the worst cases of venereal disease in three or five days; and, as he always takes his fee in advance, he might as well say he could cure them in the "twinkling of an eye." After the patient has spent all his living with this mountebank, and becomes quite discouraged in trying to get well, he finally resolves to try the physician who has carried him safely through attacks of fever, and has been his safe councillor in numerous difficulties. He goes to him—not with the truth in his heart, but with a lie on his tongue. Instead of confessing his illicit amour, he attempts to palm upon the cunning physician the foolish story of "catching the disease from a privy seat." Physicians if they are as dull by nature as the rest of mankind, certainly have opportunities to learn the weaknesses of the race to an extent that cannot be obtained by members of other professions. They know that those who under ordinary circumstances value their word most, and make the loudest professions of adherence to verity, will when caught in the venereal trap, tell the most unreasonable and useless lies. There are others, however, who seem to take pride in boasting of their peccadilloes, and in their ambition to appear versed in intrigues of love, will relate as happening to themselves and well known parties of the other sex, what would constitute irreconcilable anomalies in the disease.

Young and imprudent practitioners will sometimes allow themselves to be betrayed into giving an opinion which might forever destroy the peace of a family. A few years ago Mr. C., in a state of great agitation consulted me one morning concerning a profuse discharge from the urethra, which was attended with *ardor urinæ*, frequent and somewhat painful erections, and almost constant desire to void urine. He said, with tears filling his eyes, that he had never before any reason to suspect his wife of inconstancy, but if this was clap, then she must be guilty, for he had been entirely faithful to her. I asked him if he had heard her complain of any difficulty ; or if he had any other reason which aroused his suspicion. He replied that there was no reason why he should suspect her, except the difficulty he was suffering with. Upon further inquiry I learned that his symptoms had all come on within a few hours, and that they did not appear like those which usher in an attack of gonorrhœa. I ascertained too, that coition had taken place before his wife was quite through with her catamenia. Being suspicious of a stricture of the urethra, I asked him if he ever had a private disease. He replied that once before he was married, he caught the clap, and it troubled him for nearly a year. I then solicited and obtained a bougie examination of the urethra, which plainly revealed two prominent strictures of that canal. I assured him that his present difficulty was wholly due to his own indiscretion, and that it was not gonorrhœa, but stricture which produced this suspicious discharge. The *denouement* proved my diagnosis to be entirely correct, for under the treatment of the bougie alone he soon recovered, his wife having no symptoms of gonorrhœa. He afterwards told me, that if I had pronounced his disease clap, he should have abandoned his wife immediately, so enormous did he consider the crime of inconstancy in a woman. They have no children, but possess property, and enjoy a high degree of respectability. I am acquainted with another case equally illustrative of the risk of making an incorrect diagnosis, when the character of an innocent woman was in jeopardy, but it is not necessary to multiply details, when the force of the caution can just as well be appreciated without them.

Some men are as sure to take gonorrhœa as they expose themselves to its influence, while others never fear the disease, declaring that they have "gone in the way of it" many times, but escaped with impunity. Those who have a long prepuce seem to be most in danger of the malady, especially if the fore-skin have so narrow an opening that it is rarely or never thrown back over the corona glandis. The virus in such subjects, easily lodges among the folds of the prepuce, and finds a favorable place to multiply itself on the moist membrane above. It would be a judicious prophylactic if such individuals were circumcised, that the covering of the exposed glans might become indurated, and therefore opposed to the easy reception of the poison. There is a strong probability that the covenant with Abraham for the circumcision of the chosen people, was instituted principally as a hygienic measure. It is well known that the Jews seldom have venereal diseases, though promiscuous sexual intercourse is common among them. Circumcision undoubtedly proves a valuable prophylactic to both syphilis and gonorrhœa.

It may be remarked in this connection, that those who have gonorrhœa once, do not suffer so severely from subsequent attacks. This amelioration may be due to the hardening process the inflamed surfaces undergo before they are cured. The opinion is also entertained, that those who have had the disease once, enjoy some degree of immunity during subsequent exposures. If the idea be true, the exemption probably arises from the causes just given.

The treatment of gonorrhœa, together with the varieties, complications, and accidents of the disease, will be given in future articles. It seemed necessary to open the subject with the foregoing remarks, in order to proceed in an intelligible manner.

VENESECTION IN INFLAMMATION OF THE LUNGS.

BY JOSEPH DEITL, M. D.

[Translated from the German, by Lewis E. Miller, M. D.]

Note:—The Session of the Pathological section of the Imperial Royal Association of Physicians held a spirited discussion, on Venesection in Pneumonia, at a meeting some twelve years since, in the city of Vienna, which discussion led Dr. Dietl, who was then principal physician to the District Hospital of Wilden, Vienna, to publish his observations and experience.

Dr. Lewis E. Miller has kindly furnished us an English translation of the entire work, which we received some time since; and we have concluded to present to the readers of the College Journal such portions only as appear of the most practical importance.—Eds.

As I left the school of Raimann I was thoroughly imbued with the then called "*Antiplogistic*" notions; and I thought to prove the accuracy of those notions most triumphantly in the treatment of Pneumonia.

Shortly, tartarised antimony and potassa was highly lauded; and the idea obtained that we need not bleed freely in pneumonia if we made use of large doses of tartar emetic. It was even said, that in some cases the antimonial might entirely take the place of venesection. In fact we may give to tartar-emetic the credit of having shaken the previously existing faith in the indispensibleness of, and undoubting reliance upon, bleeding in the treatment of pneumonia.

The terrible sufferings caused by large doses of tartar-emetic had the effect to lessen the use of the salt, as the antimonial had rendered of less frequency the use of the lancet; and each case treated with less and less resort to these vaunted *Antiplogistics*, tended to lessen faith in their utility; and the predilection for their use was visibly on the decrease and only maintained its strength with the common people, barber-surgeons, and the unreflecting in the profession. The more reflecting, educated, and resolute portion of the profession has rejected these former notions and the practice founded thereon, in accordance with the spirit of research and independence characteristic of the present generation.

In the existence of the stage of transition hinted at, I obtained the direction of the newly erected District Hospital of Wilden. At first, venesection was practiced in the Hospital as diligently and with all the faith taught in the Schools. Some of the cases we considered *unfortunate*, which with the energetic and enthusiastic advocacy of the use of antimony on the part of my Clinical teacher, led me to use large doses of tartar emetic in the treatment of pneumonia, to the entire exclusion of venesection.

As, under this new treatment, many patients recovered, and in some instances very large doses of the antimonial did not produce emesis, I was led to suppose that the cases of recovery were all *cures*, and indebted to the sanative effect of the salt for their favorable termination.

But in time I was induced to omit the use of both the lancet and the antimony, and limit the treatment in pneumonia to a pure *expectant* medical and dietetic course; which is the course I have now pursued for three years, without any variation in a single case. During this period of time, I have not abstracted a drop of blood from a pneumonic patient; neither have I administered to such *any* medicine except perhaps a little salep, oil, or an acid drink; only as *complications* have rendered medicine necessary.

With these prefatory remarks, I now offer to the profession my experience in the treatment of Pneumonia.

Influence of venesection on the premonitary symptoms of Pneumonia.—The peculiar condition of the blood which causes pneumonia, first leads to an exudation through the walls of the blood-vessels into the surrounding pulmonary tissue, causing congestion and dyspnœa. This state precedes the *inflammation* of the lungs, and usually lasts three, and seldom more than five *hours.* In young and vigorous persons, and when lungs have never been diseased, a longer space of time may occur before the solids take on a chemical change. With those who are feeble, whose vitality is not capable of long resistence to chemical action, and the walls of whose capillaries have already been debilitated by a former invasion of the disease, less than three hours are required for the inflammation actually to commence. So also, with those whose lungs have been over-exerted by labor, walking, speaking, singing, or blowing wind instruments, the inflammation more quickly invades them.

The young and robust, whose lungs longest resist the localization of the disease, suffer much more from the *general* impression, than the latter class of persons. The diseased action is manifested by general and great enervation, rheumatic pains, rigors, heat, headache, delusions, delirium, and stupor, presenting often a perfect picture of typhus: especially when, along with these manifestations of the impressions made upon the nerves, there is enervation or atony of the intestines, with meteorism and diarrhœa. With those whose nerves are peculiarly impressible, I have observed pneumonia to be preceded by vomiting, convulsions, and other indications of acute suffering of the brain; so that the physician is liable to hastily diagnosticate hydrocephalus, meningitis, or acute mania. All these symptoms of *general* disease disappear as soon as the exudation into the parenchyma of the lungs is established, and the chemical change there occurs which we call *pneumonia.*

When, however, as is sometimes the case, the disease does not fix itself in the lungs, because the vital force in those organs is sufficiently active to prevent its finding lodgement there, we are accustomed to observe that it still remains in the general circulation, and may remain there a long time, to the constant peril of the patient, and a great likelihood of doing lasting injury to the brain or other nerve centres.

This condition of the blood and nerves is that designated *Synocha*, by ancient writers. This is the *Inflammatory Fever* of more modern times. This is the *Hæmitis*, or inflammation of the blood, of recent writers, but this condition has not always been clearly comprehended by some who have been quite free in the use of these terms.

With an understanding of the condition of the system during this stage of the disease it is proper to enquire as to what venesection can do to relieve the system.

Influence of Venesection on Dyspnœa.—The difficulty of breathing experienced previous to and during the existence of pneumonia, does not appear to be intimately connected with or in proportion to the amount of the hyperæmia of the lungs. We must remember that this hyperæmia is never or very seldom present in both lungs at the same time, and usually but a portion of one lung, as one lobe or even a portion of one lobe, is diseased. If the hyperæmia was the main cause of the dyspnœa, it could not be severe—but it is really almost always entirely out of proportion to the amount of the mechanical impediment to respiration.

The *real* cause of the *dyspnœa* present in inflammation of the lungs, seems to be, the peculiar impression the *materies morbi* has made upon the *nerves* of respiration, and not from the mechanical impediment of the congestion. The lungs may be far more embarassed, mechanically, than they are in inflammation of the parenchyma, and yet the dyspnœa will not be great. There can be no doubt that the hyperæmia of the lung produces a part of, but by no means the entire difficulty in breathing.

We often observe dyspnœa of a very severe grade, even before there is any exudation, or any considerable congestion even of the lung can be detected; but as the exudation increases, the difficulty of breathing is more manifest, at least for a time; and when the entire lobe of a lung is affected, that part of the thorax may become perfectly motionless; but when not interfered with by improper treatment, usually from the sixth to the eighth day of attack, the exudation softens, the lung becomes pervious to the air, and the breathing is quite easy again. Even when the substance exuded into the lung does not soften, but hardens, and hepatization occurs, the dyspnœa passes away, for *when both lungs become hepatized, the breathing of the patient will be freer and less laborious than when both lungs contain air in the vesicles even to distension, as in asthma.*

This important fact, of which any person can become assured, proves that the dyspnœa cannot be caused by the exuded material within the parenchyma of the lungs, but must have an entirely different origin.

The act of respiration is mainly for the purpose of removing the *carbonic acid gas* from the blood; and the freedom and rapidity of its removal depends mainly on the circulation of the blood through the capillaries of the lungs. Dyspnœa is usually owing, in a great degree also, to the influence of the retained carbonic acid gas in contact with the nerve or nerve centres. As the nerve force is lessened by the action of carbonic acid gas, so will the acts of respiration be diminished in fullness and utility. This is shown to be true by the dyspnœa that accompanies anæmia from any cause, chlorosis, and other conditions of the system where the amount of blood is diminished below the normal quantity, or it has lost a part of its capacity for absorbing oxygen. On the contrary, a plethory of blood is always accompanied with strong and full respirations.

Hence, while the first venesection of a somewhat plethoric patient may relieve dyspnœa, the second and third bleeding almost always *increase* the difficulty of breathing. And when only one venesection has been resorted to, the relief is but partial, and never permanent, but the dyspnœa becomes more aggravated and far more persistent than in cases where blood has not been drawn.

Influence of bleeding on the skin.—When the patient has not been interfered with, the skin is warmer than natural, and dry, during the period when the exudation is taking place from the vessels into the parenchyma of the lungs. But when the patient is of a delicate constitution, or when a considerable portion of the lungs are affected by the disease, a gentle perspiration frequently breaks out as the exudation is completed; but this perspiration does not afford relief. When, however, there is considerable moisture upon the skin, there is sometimes a remission of the more urgent symptoms. Sometimes there is no trace of sweat for several days, even until the disease has passed away.

An entirely different course of manifestations follow venesection. Immediately after bleeding, there often follows a profuse transpiration or exudation of the inflammatory matter into the substance of the lungs, and not unfrequently a copious sweat. After a few hours however, the skin becomes very hot and dry. After repeated venesections, the moisture on the surface becomes profuse and lasting, and extremely debilitating, like the colliquative perspiration of severe disease. This continuous moisture of the skin after repeated bleedings continues even until a late convalescence, if the patient finally recovers, and is profuse and the patient weakened in proportion to the amount of blood abstracted and the slowness of the restitution of the vital fluid through the organs of digestion and assimilation.

In no instance have I seen these profuse and debilitating continuous perspirations, in a case of pneumonia, who had not been bled. On the contrary, I saw the most severe cases pass through their different stages and run their course to a complete cure, without *any* medication and without any perspiration, except the *insensible* perspiration of health, while the softening, absorption, and disappearance of the exudation into the pulmonary tissue, took place rapidly, certainly, and far more perfectly than in other patients who had perspired profusely.

I came to consider a profuse perspiration in pneumonic patients, omenous of a grave and probably fatal form of the disease, at least where that condition had been the result of venesection, the use of tartar emetic, or other debilitating, and so-called "*antiphlogistic*" treatment. I have no hesitancy in advancing the opinion, that such profuse sweatings are the direct result of *debility*, and do not indicate any favorable change in the diseased organ. The water of the perspiration *cannot* come from the diseased portion of the lungs, but mainly from and through the walls of the debilitated capillary cutaneous vessels. The weaker the patient, and the more sparse his blood, the more persistent and profuse will be the perspiration.

It is often true that sweating occurs at the same time there is release from pain, as both are common phenomena in pneumonia, but it is never "critical" as has been supposed, and should not be provoked by debilitating measures. As I have said, sweating is by no means necessary in the cure of pneumonia, as the most favorable cases get entirely well without it.

AMBER.

BY JULIUS MAETKE, M. D.

(Concluded from August Number of the College Journal.)

Having thus treated of the history of amber and the hypotheses of its origin, next in order I will treat of its position in the materia medica as a therapeutical agent.

Amber in substance: Powdered amber, (*Succinum pulveratum*,) as far as I am acquainted with it, finds no other application in the healing art, except in Rademacher's *Emplastrum miraculosum*, of which it is an ingredient. Why this physician, whose name in all probability is known to a great many professional brethren of this country, has given that name to a formula of his own, I cannot say. It may suffice to mention, that he used only this one plaster in his extensive practice, and he may have done miracles by its application. The mode to prepare it, is as follows:—Heat of olive oil 16f℥ to the boiling point, and then add gradually fine powdered minium, (red oxide of lead) 8 oz. Stir constantly, until the oil and lead unite, as is known by the black color of the preparation. Then set the mixture aside, stirring it until it becomes cool, when three drachms fine powdered amber, two drachms powdered camphor, and one drachm burnt alum also in a fine powder are to be added. It is a valuable application in syphilitic, scrofulous, and other ulcers, in burns, and in several skin diseases.

Rasped amber, [*Succinum raspatum*,] is used for making fumigations in rheumatic affections.

TINCTURE OF AMBER, (*Tinctura Succini*,) prepared by taking one part rasped amber, which is previously well roasted in a suitable vessel, and digesting it with eight parts by weight of alcohol, for a sufficient length of time, is a European remedy. It is highly spoken off in functional disorders of females, as in hysterics and dysmenorrhœa,—given in combination with tincture of valerian, tincture of castor, etc. Uncombined with this latter article it is also applied in spasmodic affections. The dose is of from twenty to thirty drops, on sugar.

SUCCINIC ACID, [*Acidum Succinicum*,] is mostly given in combination with ammonia. A saturation of these articles is called Succinate of ammonia (Liquor ammonia succinici; Liquor cornu cervi succinatus; Spiritus ammonii succinatus). As a medicinal preparation the solution must have a spec. gr. of 1.06. It is given in erethism in typhus fever, combined with musk and other stimulants, and serves as a powerful agent. In inveterate rheumatic complaints and metastases; in nervous apoplexy, spasms, and paralysis, it is given with great benefit; also in pneumonia notha, in combination with benzoic acid, camphor and ipecac;—and, with large doses of musk, in gangrene. Siebold has applied succinate of ammonia combined with tincture of castor and tincture of opium in cases of incarceratio placentæ, caused by spasms of the uterus.

LIQUOR ANTARTHRITICUS ETHERI, is a preparation, officinal in different parts of Europe, and very frequently used. It is prepared by mixing together equal parts of a solution of succinate of ammonia (sp. gr. 1.06) and Hoffmann's anodyne liquor. As a remedial agent, it is given in erethism in typhus fever; in paralysis, spasms, and several rheumatic affections; in doses of from fifteen to twenty drops every hour or two.

OIL OF AMBER, [*Oleum succini*]. The rectified article is mostly in use, both as an external application and given internally. Compound Liniment of oil of amber is a stimulant and anti-spasmodic, useful in asthma, rheumatism, spasmodic affections, hooping-cough, etc. It is usually applied along the whole spinal column, [King.]. Internally applied, oil of amber is a fine agent in spasmodic affection, chiefly in cases of hysterics, and new born infants (infantile convulsions); in faintings and paralyses, in combination with sulphuric ether; in gonorrhœa and leucorrhœa, combined with balsam copaiva and turpentine; also in amenorrhœa it is given with the best success.

In Eau de Luce [*Aqua Luciœ*] we find oil of amber as an ingredient. This preparation consists of:—white castile soap, three grains, alcohol 1f℥; rectified oil of amber a half drachm; and liquid ammonia 2f℥. It is used internally in hysterical cases in doses of from fifteen to twenty drops, mixed with water or tea; also externally in bites of serpents, stings of insects, vipers, etc.

Artificial musk, [*Moschus artificialis, seu factitius,*] possesses nearly the same therapeutical properties of the real musk, although in a less degree. It is a valuable agent in spasmodic disorders; in tpyhus and typhoid fevers, where convulsions have set in; also in whooping-cough. A suitable formula for its application in the latter disease is the following:

℞. Artificial musk,
Gum Arabic, aā gr. x.
White sugar ℨj.

Triturate them all to a very fine powder and mix thoroughly with the half of a yolk of an egg; finally add gradually water f℥ jss. Shake the bottle before its contents are used; also keep it in a cool place. The dose for a child two years old, is a teaspoonful every two or three hours.

A solution of one part of artificial musk in eight parts by weight of alcohol, is known by the name of Tincture of Artificial Musk, [*Tinctura moschi artificialis*] and may be given in cases where alcohol is not contra-indicated.

The chemical properties of amber. The term *succinum* originated undoubtedly from the latin succus, which means sap; because it was considered the exudation of a tree.

Succinon is a body analogous to aceton. This word is derived from the latin *succinum* and the syllable *on*. Darcet procured this article by the dry distillation of succinate of lime. It forms a brownish liquid, which by repeated rectification loses its empyreumatic odor, and becomes colorless; it contains carbon, hydrogen, and oxygen.

Succid, a substance rather hypothetical, forms with 1 eq. of oxalic acid, succinic acid. It is similar to benzid, which in combination with 1 eq. of oxalic acid, gives benzoic acid. Loewig discovered succid, and gave a description of it.

Succinamid, or *Succinimid* appears from the latter chemist's account to be oxamid-succid. The name is formed from succinum and amid, i. e. succine acid in which 1 eq. oxygen is replaced by 1 eq. amid. According to Fehting it is procured by the action of two fluid measures of liquid ammonia upon one of succinic ether; the mixture is allowed to stand for a few days until crystals are formed, which are finally washed with water. They are sparingly soluble in this menstruum, but easily dissolved when the water is heated. The crystals are opaque and hard. A solution of this salt does not become turbid by the addition of a metallic salt. Caustic potassa, when added. evolved ammonia. Succinamid fuses by heat, forming ammonia and a crystaline body, leaving carbon as a residue. Its formula is $NH_2 + C_4 H_2 O_2$.

Succincamphor was discovered by Vogel from the dry distillation of amber. This article sublimes towards the end of the process, forming a yellow wax-like substance which when liberated from the adhering oil leaves yellow micaceous crystals, possessing neither taste nor smell. They melt at 100° R., are insoluble in water and alcohol, slightly soluble in ether, but to some extent in etherial and fatty oils. The formula according to Laurent is: $C_{12} H_4$.

Pelletier and Walter have divided this substance into two different articles, a yellow one, which Laurent called *chrysene*, and a white one, similar to idriatine, which has received the same *succi-stearin.* The plan which these chemists adopt in order to separate these articles from each other, is as follows:—After freeing this waxy material from all adhering oil, they exhausted it of the soluble part, by ether and obtained a yellow substance resembling mica, which they boiled with absolute alcohol, but the quantity used was only sufficient to form a fluid mass, not a solution. Thus a powdery substance of a darker color, chrysene, was formed, whilst the alcoholic solution yielded by refrigeration some colored leaf-like crystals, which may be obtained in a pure state by repeated crystallization. This is succi-stearin. It forms delicate, white, flat crystals, without odor and taste, is insoluble in water but slightly so in cold alcohol and ether, yet easily dissolved by heating; also soluble in etherial and fatty oils. It melts at 160° R., sublimes in closed vessels without decomposition at 300° R.; alkalies and cold mineral acids do not act upon it, heated sulphuric acid dissolves and give it a blue color, subsequently it becomes carbonized and of a black color. Nitric acid changes it into a yellow resinous matter. Its formula is the same as chrysene, $= C_{24} H_8$.

Succin-eupion is an oily body in many respects similar to eupion; and according to Elsner a component of the oil of amber. This substance has not as yet been applied to any purpose except in the formation of artificial musk. Succin-eupion is the only article from which artificial musk can be formed, and being an ingredient of the oil of amber we use the latter article for that purpose. Three parts of concentrated nitric acid are added to one part of the oil, an action takes place, the musk is deposited at the bottom of the vessel, and the remaining liquid is carbazotic acid, to which reference will be made hereafter.

Artificial musk, is a tenacious, dark, reddish brown resin; in thin layers, clear, and of hyacinth color. In large quantities it smells like the residue from the distillation of succinic acid and oil of amber, which is known as colophonium succini; but in small quantities when in a state of solution, it has a peculiar odor very much like musk,—hence the name. Its solutions have a pungent, bitter, and aromatic taste; it is easily dissolved in alcohol, ether and etherial oils,—the alcoholic solution has an acid reaction. This artificial musk evolves with caustic potassa and ammonia, and consists of: $C_{15} H_8 NO_7$.

The action of nitric acid upon succineupion of the oil of amber, produces as has been already stated, another substance, which Welter, the discoverer, named Welter's bitters. But later chemists have investigated this article and found that it possessed acid properties. Some called it *carbazotic acid*, others *nitro-picric acid.* It is found in the solution after the deposition of the artificial musk, and obtained by evaporation and crystalization. Carbazotic acid forms yellow, shining, leaf-like crystals, soluble in hot water, (sparingly in cold); alcohol and ether dissolve it. Its solutions redden litmus, having an extremely bitter taste. The crystals when heated melt, and volatilize without decomposition; but if added to a saturated solution of any of the salts of potassa they form a yellow crystaline precipitate of carbazotate of potassa. The formula of this acid is, $C_{12} H_2 N_3 O_{12} + HO$.

Oil of Amber is a product of the dry distillation of amber. In an impure state it is of a dark brown greenish color, and of a strong disagreeable smell, but becomes by repeated rectifications limpid and nearly colorless; and on exposure to the light and air it gradually changes its color again and also its consistency, becoming dark and more tenacious, and finally solid. According to Pelletier and Welter, oil of amber consists of at least two different oils, both isomeric and of the formula of, $C_{18} H_{14}$. Both of these oils, when treated with sulphuric acid, evolve considerable heat. Their boiling point is very different, one varying from 110° to 260° R., the other from 140° to 300° R., and when it arrives at this temperature, if the experiment is performed in a close vessel, succin-camphor is formed. Hydrochloric acid gas when brought in contact with the first oil, produces a bluish reaction; the second it leaves unchanged, but it becomes after a while of a yellow color. The alkalies act upon it rather imperceptably.

Succinic acid was known to Agricola and described by him in 1546, he calling it amber salt. Boyle in the seventeenth century recognized it as an acid. Lowitz in 1793 showed how to purify this acid by means of charcoal. Berzelius determined its elementary constituents.

Succinic acid is found in amber in combination with oxide of calcium as succinate of lime. According to Lecame, Serbat, and Unverdorben, it is found in small quantities in turpentine. Cerutti obtained it from a resinous fossil, called retinit. Zwenger met with this acid in wormwood (artemesia arbornthium) combined with potassa, as an acid salt. It can be artificially procured according to Bromeis by the oxidation of euargaric and stearic acids, with nitric acid; or as Ronalds has demonstrated, by oxidizing yellow wax with nitric acid. When amber is submitted to distillation in a retort that has a tubulated receiver attached to it and heat applied, a yellow acid liquor, and afterward a thin oil of a yellowish color, passes over, and a waxy substance is found in the neck of the retort and upper part of the receiver. If the heat is continued, the oil slowly assumes a deeper color, until finally it become black and of the consistency of pitch. The oil obtained is called oil of amber, and the liquor which has an acid reaction, is impure succinic acid, yielding crystals by evaporation. The acid thus obtained is very useful for medical purposes, and has the odor of the oil. To purify and deodorize it entirely, it must be boiled with nitric acid, evaporated to dryness, re-dissolved in hot water, digested with pure animal charcoal filtered, evaporated and crystalized. It forms white, inodorous, prismatic crystals, having an acid taste; at 140° R. they are decomposed into water and a sublimate called succinid, which can be re-converted into succinic acid by boiling with water. Succinic acid melts at 180° R. and boils at 235° R. evolving vapors which irritate the respiratory organs; and when sublimed assume long needle-like crystals. It is soluble in twenty-five parts of cold, and two parts of boiling water; in three parts cold and one and a half parts boiling alcohol; and also in ether. The solutions have an acid reaction. Chlorine and nitric acid produce no effect on it. By heating with sulphuric acid and deutoxide of manganese, acebic and carbonic acids are formed; when brought in combination with caustic potassa, oxalic acid is produced. The formula of the acid deprived of water and called succinid, is $C_4 H_2 O_3$. The formula of the hydrated acid is $= 2 (C_4 H_2 O_3) + HO$.

Salts of succinic acid are white and colorless, provided the base has no color; they are called succinates, and become decomposed by dry distillation. Some of these salts are very soluble, in water and crystalizable; others of them are not, but dissolve in a menstruum containing free succinic acid.

Succinic ether discovered by Darcet, is procured by adding hydrochloric acid to a saturated alcoholic solution of succinic acid. It separates upon the surface of the liquid and becomes pure by washing with water; forms a colorless oily liquid of 1.036 spec. gr.: possesses a weak aromatic smell and a pungent taste; boils at 214° R., decomposes in contact with chlorine and liquid ammonia, and yields with the latter, succin amid. The formula of it is, $C_4 H_5 O + C_4 H_2 O_2$.

Succinate of ammonia is procured by the saturation of the acid with carbonate of ammonia. The pure salt serves in analytical chemistry as an agent to separate peroxide of iron from protoxide of manganese. A neutral solution of succinate of ammonia when evaporated loses some ammonia, leaving crystals which are of an acid reaction and do not effloresce.

Succinate of iron, is a basic oxide, obtained by the reaction of a solution of peroxide of iron upon neutral succinate of ammonia, it forms a reddish-brown voluminous precipitate; it does not decompose except by the action of hot water when it is changed into a basic and an acid salt as formerly believed, but the hot water aided by the predominating free acid, takes one part of the precipitate with it through the filter. Doepping gave the formula as, $Fe_2 O_3 + S$.

Succinico-hyposulphuric acid is, according to Fehling, an article in which 1 eq. of hyposulphuric acid is replaced by 1 eq. of hypohsulphuric acid. It is obtained by the action of anhydrous sulphuric acid upon succinic acid. To procure it in a pure state the mass ought to be diluted with water, the surplus of sulphuric acid taken up by means of carbonate of baryta, then filtered and the filtered liquid precipitated with acetate of lead; this is decomposed by means of sulphuric acid, and the filtered liquid evaporated in a vacuum. It forms crystals of a verrucous appearance, are very hygroscopic, of an acid taste, easily soluble in water and alcohol, and according to Fehling it has the following formula: $C_8 H_2 O_5 + S_2 O_5 + 8$ eq. Aq.

Compounds of this acid with bases form salts, for the most part soluble in water, except those containing lead and silver; and have from 1 to 4 eq. of base, to 1 eq. of acid.

OPHTHALMIA.

BY PROF. HOWE.

Under this general and rather indefinite term, may be ranged, according to common consent, almost all varieties of conjunctival inflammation. Ophthalmic surgeons, when they wish to designate grades and peculiarities of inflammation having its seat principally in the conjunctiva, speak of *conjunctivitis* as being *simple* (*acute and chronic*), *catarrhal*, *purulent*, *contagious*, *gonorrhœal*, *leucorrhœal*, *etc., etc.* And all of these varieties of a general affection have certain characteristics which it is necessary to understand in order to manage each form of the disease successfully. It is to be apprehended that the chief cause of failure in the treatment of ophthalmia, arises from the habit of regarding all inflammatory affections of the conjunctiva as depending upon a common cause, and, therefore, amenable to a common remedy.

Simple Conjunctivitis often arises from injuries; from foreign bodies beneath the eye-lids; from exposures to irritating winds; and extremes of heat and cold. It is characterized by pricking pains in the eye, the sensation being like that which attends the presence of a mote on the conjunctiva though it be entirely due to distention of the vessels ramifying in that membrane. On account of the irritability or increased sensibility of the parts about the eye, there results increased lachrymation, the tears becoming acrid and scalding. Some degree of photophobia at length is reached, which subjects the lids to partial closure. Red corpuscles are now forced into vessels that usually transmit only the colorless portion of the blood, giving the eye a blood-shot appearance. It is well to notice the character of the vascularity as a diagnostic symptom in distinguishing between conjunctivitis and inflammation of the sclerotic and deeper coats of the eye; the vessels in the former affection being tortuous and forming a plexus or net-work, while in sclerotitis they are nearly straight and radiate from the cornea into the "white" of the eye where they appear to be lost.

Little or no *treatment* is required in the simple forms of conjunctivitis. The application of cold or warm water—that being selected which is most agreeable—will usually hasten the recovery. At first, bathing the eye in cold water usually operates best; subsequently, warm water is preferable and most serviceable. Simple cerate, or glycerine in which has been mixed a small quantity of hydrocyanic acid—six drops of the latter to an ounce of the former—may be applied to the edges of the lids at night, to obviate the adhesion and subdue the irritability that usually occurs. The stomach is to be kept in a condition favorable to active digestion; and the bowels free, to secure the ready absorption of the nutritive material of the alimentary canal. Anæmic and debilitated subjects need chalybeates, quinia, and sometimes iodine. These remedies in moderate doses are ordinarily sufficient to improve the case, yet large doses will be required to favorably impress those patients who have remained a long time without much change for better or worse. If there be great irritability of the eye, it should be relieved by occasionally wetting the brow with a solution of the cyanide of potassium—a drachm of the salt to a pint of water—, and exposing the organ to the vapor arising from a hot infusion of hops or poppy heads. It is to be distinctly understood that *no poultice*, nor anything which acts like a poultice, as wet compresses continued for sometime, pieces of meat, alum curds, and many other popular remedies of a similar character, *is to be applied to a diseased eye.* This is a sweeping statement, yet one to be rigidly observed by those who have not extensive experience in ophthalmic practice. A poultice produces excessive injection of the vessels, and œdema of the subjunctival tissue; and under its influence the cornea becomes infiltrated, and not unfrequently staphylomatous. A sound eye may be destroyed in a few days by the continuous action of a poultice alone.

A cold infusion of golden seal, or a solution of salicine, makes a collyrium of value in the treatment of almost all varieties of conjunctivitis after the disease has reached the chronic state, when a tonic course is indicated. Zinc, lead, copper, and other astringent salts are often used in solution as collyria, but their effects are uncertain, and often injurious. In simple conjunctivitis such lotions, instead of giving relief, irritate the eye even when no more than half a grain of the mineral salt is dissolved in an ounce of water. Let the condition of the disease be what it may, abstinence from strong light and everything fatiguing to the eye, must be scrupulously observed.

PURULENT CONJUNCTIVITIS WITH GRANULAR AND OTHER COMPLICATIONS.

People living in certain districts are liable to frequent attacks of ophthalmia, which present very severe symptoms. The eye, instead of simply showing signs of inflammation by increase of vascularity and some super-sensitiveness of the organ, manifests a morbid condition which is characterized by a secretion of purulent or muco-purulent matter, and an aggravated state of the symptoms ordinarily attending conjunctivitis. The discharge often has properties of a contagious nature; so that the disease having once been generated, spreads until whole families and communities are infected. In just what way the virus is transferred from one individual to another, is not always known. Undoubtedly certain persons, debilitated by poor diet, over-exertion, and bad habits, are predisposed to the disease. As soon as such individuals are exposed to the malady they are sure to take it; while others whose general health is such as to repel disorders of almost any kind, enjoy perfect immunity. Wiping upon a towel or napkin used by an infected person, is a fruitful source of propagation. It is contended by good observers that the disease is diffused by atmospheric contact, the malady being epidemic as well as contagious. About the commencement of the present century the British armies in Egypt suffered disastrously from ophthalmia, several thousand soldiers becoming totally blind from the effect of the disease. The inmates of emigrant and slave ships often are attacked with ophthalmia, few escaping, so certain is the malady to fix upon those brought into its immediate influence. The French slaver *Rodeur* having a crew of twenty-five, and a cargo of one hundred and sixty slaves, was invaded by the disease fifteen days after her departure from the coast of Africa. The affection appeared first among the blacks, and soon became so universal in the ship that only one sailor escaped on the voyage, and he was attacked at Guadaloupe, the place of their destination. Of the crew, twelve including the surgeon entirely lost their sight; five others lost one eye, and four escaped with opacity of the cornea and adhesion of the iris. The loss of vision among the slaves was proportionally not so great, yet of those who survived the voyage, thirty-nine were totally blind, twelve lost an eye each, and fourteen had corneal opacities.

In some parts of the United States, especially in the West and South-West, catarrhal or purulent ophthalmia is very common. Those who live on the prairies suppose that long exposure to the rays of the sun, there being few trees to afford shade and modify the light, produces the ophthalmic difficulty; while others who reside in woody districts believe there is some poison, like that of ague miasm, emanating from the foliage or from the earth, large tracts of which are kept in perpetual shade during the summner months. As long as views so diverse are held by those who have the best opportunities for making observations upon this subject, the cause of the disease is likely to remain involved in mystery. If it be granted that the disease is strictly contagious, and not epidemic, the cause of the first case in a community has only to be sought or accounted for. But, as isolated cases appear in all parts of a country, and under every variety of circumstances, if the cause were ascertained in a single instance, it would throw very little light upon its origin in other cases.

New born infants may have a dangerous form of ophthalmia. In many instances, the disease arises from the direct application of virus to the eye as the child is being born. As announced in the early part of this article, the pus from acute vaginitis may be sufficiently virulent and contagious to produce purulent conjunctivitis, the virus having been transferred by some accident from one membrane to the other. Analagous to this is gonorrhœal ophthalmia, the cause of which arises from the accidental transference of what some denominate a "specific" virus from the genitals to the conjunctiva.

Purulent ophthalmia during childhood is common; and is not essentially different from that which occurs later in life. It is often called "strumous" or "scrofulous," though any particular diathesis may not have been noticed in the patient had the eyes and other parts of the body continued sound. This variety of conjunctivitis has some peculiarities, the most striking of which is, intense intolerance of light. In other forms of ophthalmia the photophobia is generally a marked symptom, yet its intensity is pathognomonic of the variety in question. The child goes feeling its way about the house, with its face buried in something, having so narrow a fissure between the lids as to admit only the faintest rays of light. When viewing a plaything he will do so in some dark corner, and with one eye squinting down upon the object, the hand being used to exclude any direct light. If any attempt be made to examine the eyes, the child will bury his face in his mother's lap, no ordinary force being adequate to remove him. Being violently wrested from his mother, and his face turned to the light, spasmodic twitchings of the eyelids and of all the muscles of the face, will indicate the nature of the case. If a glimpse between the lids is fortunately obtained, nothing but the vascular conjunctiva will be seen, the cornea being rolled upwards and hid behind the upper lid. The lachrymal fluid is secreted in such quantities that at each relaxation of the orbital muscles scalding tears pour over the face. It is almost impossible to obtain, without the use of chloroform, a better view of the eye. If extraordinary force be used a satisfactory examination cannot be obtained, therefore it is better to employ an anæsthetic, or relying upon the diagnosis thus far obtained, apply such remedies as will overcome the excessive photophobia.

Pathological Characteristics.—Purulent ophthalmia exhibits at first, great redness of the conjunctiva, which depends upon simple engorgement and enlargement of the vessels ramifying in that membrane.

The purulency comes from the high grade of the inflammation, and, perhaps, some influence of a specific character. When granulations appear upon the lids, they are produced by the same forces that send them forth in the repair of a wound. By the violence of the disease that most delicate of all the membranes, the lining of the lids, is ulcerated, rendering the condition of the sulcus between the lid and the ball of the eye like a fresh, granulating wound. The outer layer of the cornea is destroyed in the same way, leaving dull and hazy what is usually clear and glassy. The cornea usually has no red blood entering it, but after it has long been besieged with inflammation quite large red vessels may be seen ramifying in it. Before this stage of the disease has been reached there may have been observed several little cup-shaped ulcers in the cornea. These are often quite deep, and look as if they might reach clear through the crystal body in which they are embedded. And in some instances they do so far weaken the cornea in places, as to allow of protrusion of the aqueous humor, carrying before it the few layers of the cornea that are still unbroken. This produces a staphylomatous state, which is somewhat dangerous to vision. In other instances, either from the disorganization and thinning of the cornea, or the pressure of the humors of the eye, the disease having caused an increase of the secretions inside the eye-ball, a staphylomatous condition of the entire cornea is reached and sometimes a rupture of that body, allowing the humors to escape, and a consequent collapse of the eye.

Symptoms.—The symptoms of purulent ophthalmia are similar to those which attend simple conjunctivitis, except they are more aggravated, and attended with a discharge of pus. Several days after an exposure to the influence of the poison, a sensation as though a particle of sand had lodged in the eye, attended soon with itching of the lids and increased lachrymation, will arise. In the morning the edges of the lids will be glued together, and the cilia are collected into knots or rolls, having a drop of thick pus at their extremities. The tears seem to be very hot. Swelling comes on and shows itself by puffing up around the cornea, constituting what is denominated chemosis. In the course of a few days the grade of inflammation rises so high that there is much distress about the organ. Pain will dart through the forehead, and temples. Strong light aggravates the symptoms, and drives the patient to shield the eyes from its influence. The idea is not readily abandoned that their is a foreign body under the lids, and repeated examinations of the organ will be solicited. The severity and continuance of the pain and distress at length bring on difficulties of a constitutional character, consisting of digestive and circulatory derangements. Domestic remedies, *in extenso*, are used, many of which aggravate the disorder, especially when anything harsh is employed. Vision grows dim from the corneal infiltration, though this change is not particularly complained of as the strong light is thereby debarred. The patient sits much with his chin in his bosom, his hand covering his eyes; and when he wishes to see anything, he looks down upon it askance. He is disposed to bury the face in a pillow or napkin to keep the eyes from moving beneath the lids, as well as to exclude the light. Occasionally the disease extends from the conjunctiva to the deeper structures of the eye, rapidly destroying vision.

Treatment.—To bring to a rapid and successful issue every case of purulent ophthalmia, is more than can be safely promised. The disease, too, is very apt to relapse. A patient may be convalescing most happily, and so nearly recover as to cease all treatment, when suddenly, and without any well known cause, the eyes will take on renewed irritation, and soon be as bad as ever. Let not the inexperienced, then, pronounce a case well and out of danger before it really is, or his decisions will lose authority.

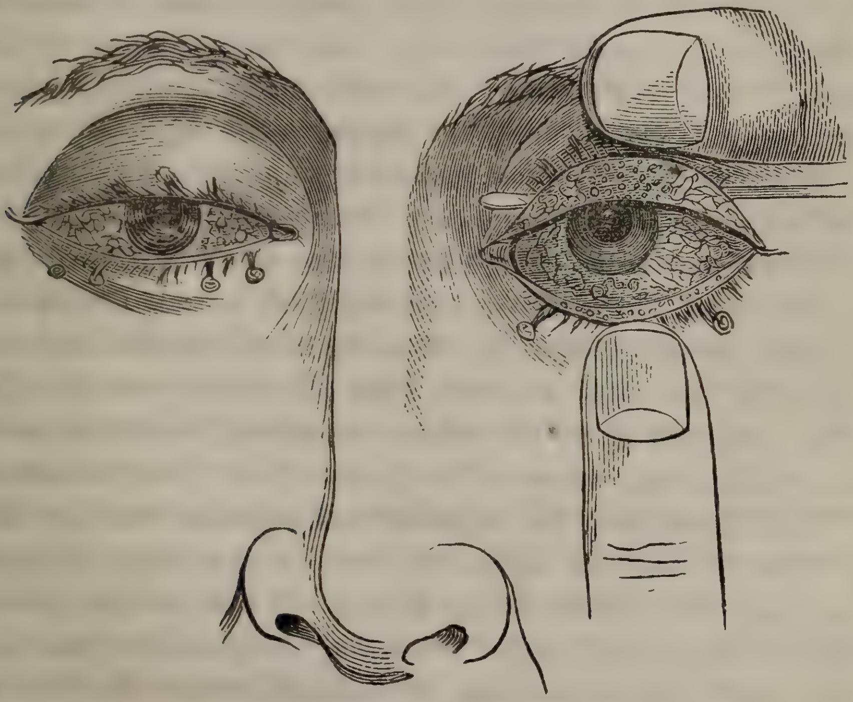
When a case is seen early, in what very properly may be called the acute stage, cathartics of a mild character are to be administered and repeated every other day for two or three times, the repetition of the medicine being influenced by the condition of the patient; aconite is to be given, to reduce the arterial excitement, if any be present; and antiphlogistics locally. Of the latter agents no poultice nor anything acting like a poultice, as was remarked in the treatment of simple conjunctivitis, is to be employed. The eyes are to be kept clean by means of a syringe or soft napkin, using cold or warm water as the sensations of the patient may indicate. After being thus cleansed, they may have blown or dusted into them every three or four hours, a powder composed as follows:

℞. Tannic acid, grs. x.
Sulph. morphia, gr. j. M.

and triturate. A half a grain of this will be enough for each application. As the powder is dissolved in the eye, its astringent and anodyne qualities will be brought to bear upon the inflamed surfaces, though the profuse lachrymation do soon dilute and wash away the remedy. Sometimes a current of water directed upon the eyelids for some minutes, relieves the pain and the excitability. An infusion of arnica flowers and rhaspberry leaves frequently sopped upon the eyes with a soft cloth or sponge, is among the valuable means to be employed in the treatment. The application of solutions of copper, zinc, silver, and alum, is uncertain in its effects, though it often affords relief. The benefit of such agents is, however, more apparent than real, the discharge being checked by them, while the force of the disease remains unabated. A cold infusion of wild cherry and golden seal, does good more uniformly than solutions of the mineral salts.

When the disease reaches the chronic form, as it often does before the physician is called to treat it, a somewhat different course is to be pursued,—much depending in each case, however, upon peculiarities. The old plan of treatment by venesection, tartar emetic, and mercury, is entirely abandoned. It is now known that in chronic inflammation the irritation increases in the inverse ratio to the depletion. In the majority of cases it will be found that subjects suffering from ophthalmia are already worn down by disease and anxiety, until nourishing food, tonics and even stimulants, are demanded to avert ulceration of the cornea.

Before administering any kind of medicine it is necessary to examine the eye throughly in order to determine the real condition of it. The upper lid can be everted very easily by any one used to the manipulation of it. The probe of the pocket case is laid on the middle of the lid parallel with the palpebral fissure, and pressed downwards with a sliding motion at the same time that the thumb and finger of the other hand, grasping the cilia, carry the lid down over the lower palpebra. The probe now drops, as if into a groove, and the thumb and finger still holding on to the cilia, lifting up, easily turn the lid inside out,



the elasticity of the tarsal cartilage assisting in the eversion. The probe being confined in a fold behind the lid, may be let go of, and the thumb be used as observed in the diagram, to hold the upper lid in the everted state. The whole process can be accomplished in a second of time. The inside of the lower lid may be sufficiently exposed by placing the forefinger on the lid near the cilia, and depressing it. Having observed whether there be any granulations upon the lids, and the condition of the cornea, whether it has little blisters, ulcers, vessels entering it, and haziness, the treatment is to be decided upon accordingly. If one or more of the above conditions be present, or a high degree of conjunctival vascularity, nitric acid at full strength should be applied as follows: Take a spatula of wood, thin, narrow, and smooth, and dip it in the acid; then wipe it dry, enough being left in the wood to effect cauterization. The diseased conjunctiva having been exposed in the manner just explained, let the prepared spatula be laid upon the part to be cauterized, then raised and laid upon another place, repeating the application in this way until it is used upon as much surface as is required, never touching the cornea although particular care must be taken to apply the caustic around that body. The pain elicited by the acid application, is not very severe. The caustic is to be applied every two or three days until the case has so far improved that such applications are no longer indicated. The patient is to apply every two or three hours, between the lids, with a camel's hair brush, a mixture of glycerine and hydrocyanic acid—five drops of the latter to a fluid drachm of the former. This keeps the roughened and irritated surfaces of the eye lubricated as well as quieted. It also prevents the lids and cilia from adhering when the eyes are kept shut for a little while. The skin above the eyebrows is to be wetted occasionally with a solution of cyanide of potassium,—four or five grains of the latter, to an ounce of water. This diminishes the supra-orbital pains, as well as the photophobia. The tincture of iodine is used for the latter purpose with much success, yet it stains the skin, and will not subdue pain as well as the remedy first mentioned. When the circumorbital pains are very severe the skin in that region may be smeared several times a day with the following mixture:

℞. Glycerine, f℥j
Hydrocyanic acid, fʒj.
Aconitina, grs. iv. M.

The patient is not to expose himself to a strong light, or get under the influence of excitement. His bowels are not to be constipated, nor depleted with repeated cathartics. The internal use of the iodide of potassium is sometimes beneficial, though the use of iron and quinia generally does better. Every case improves rapidly under this treatment, and few fail to recover. A relapse is always to be feared until the recovery is perfect. Green spectacles, or a green shade over the eyes, are serviceable shields against strong light, though exercise is to be taken early in the morning and late in the afternoon, when the sun is near the horizon. Let the patient gradually habituate himself to the strong light of midday.

Those patients who do not satisfactorily improve under the treatment here recommended, have a vitiated stomach and liver. Let an emetic be given, and that followed the next day with a dose of the compound powder of jalap. This kind of medication clears the intestinal canal of those collections of ropy mucus which prevent digestion and assimilation. In treating children who have fed on pastry, candies, and fancy food, the emetic and cathartic must not be neglected. The diet of these little patients should be bread, milk, fresh meat, and potatoes. In treating the "strumous" ophthalmia of children the use of anæsthetics will be almost indispensible in reducing the patient to a state that the eyes can be examined and medicated. Instead of using nitric acid as a caustic in these cases it generally does as well to apply a crayon of the sulphate of copper. The latter agent has been highly extolled in all forms of ophthalmia, and really has effected some remarkable cures. With it I have not met such uniform success as others have claimed. When a simple astringent collyrium is needed, a solution of the sulphate of copper—three grains to the ounce of water—makes a good one. Tonic and astringent collyria are needed in the convalescing stage of the disease. A very weak solution of the muriated tincture of iron—five drops to the ounce of water—is among the best of these.

Those who are unacquainted with the effects of astringent and caustic applications upon the eye, commonly make their astringent collyria too strong, and their caustics too weak. Nitric acid weakened by standing in a vial stopped with cork is unfit to use upon the conjunctiva as a caustic. The disease is aggravated by such applications.

In the management of conjunctivitis, let the cilia be closely examined, to see that no "wild hairs" aggravate the disease. Many patients have lost their sight through this trifling cause. And while such sources of irritation are allowed to continue, no treatment but that of removal, would effect anything.

EDITORIAL DEPARTMENT.

PHYSICIANS AND APOTHECARIES.

In the country, where each physician is obliged to prepare a large share of, and dispense all the medicine he prescribes, the peculiar position and function of the apothecary is not always clearly understood; and is in reality, a matter of but little importance to be understood by the profession. But in the cities and larger towns, where the patients reside within a reasonable proximity of the apothecary, the existence of places where prescriptions will be properly prepared by conscientious and well-educated men, is always a matter of very great convenience, and often, of vital importance.

These two classes have and must exist together; and as they occupy the most intimate relation to each other, and are mutually dependant, it is necessary that each should understand their relative positions; and it is at times, important that the *public* be also made acquainted with their relative positions and duties.

Apothecaries must always be the servants of Physicians, and if the position is repugnant to their feelings they should leave the business. Physicians, alone, have the care and responsibility of the treatment of the patient; and usually, the apothecary *cannot* have a knowledge of the case sufficiently definite to give his opinion any value, even if he had been educated to the profession of medicine. It is obviously the duty, therefore, of the apothecary, to follow the directions of the physicians and to fill the prescription *exactly* as directed, without change or substitution; and neither by word or act do anything to lessen the confidence of the patient or friends in the treatment pursued. In all the larger towns where there are several apothecaries, this is so well understood that none will do otherwise, except in a secret or covert manner. But, if a prescription is not clear and distinct, the apothecary must always return it to the physician for correction. Common Paragoric elixir is often prescribed as *Tinct. Opii Camp.*, or as simply *Tr. Opii c.*, and if the apothecary is satisfied when a prescription for *Tinct. Opii* comes to him, that the dose is too large and may be fatal, he must return it to the physician for correction, or he must put up the weaker and less dangerous tincture. So also, if *Tinct. Aconite* is prescribed, he must always suppose the tincture of the *leaves* was intended unless the *root* is specially named. This rule is the one for the apothecary's guidance in all cases.

When a prescription is returned to a physician, it must always be done in such a manner, if possible, as not to excite suspicion or cause a loss of confidence on the part of the patient. The physician, if a gentleman, will always feel grateful and express that gratitude whenever any supposed error or oversight is thus pointed out. But, unfortunately, all practitioners of medicine are not gentlemen, and several instances have come to our knowledge where physicians have sadly failed to acknowledge their obligations to apothecaries who have endeavored thus to save the lives of the patient and the reputation of the attendant.

The very intimate relations of the two callings have in some instances led them to become united by the payment of a *percentage* to the physician on prescriptions. But the very obvious injustice and dishonesty of making a patient pay more for his medicine than the proper price, or of paying a physician once for his services and again through the amount charged for medicine, is now so well understood by the people as well as the profession that it is now never practiced except as other iniquitous courses are pursued, in secret. But there is at least *one* apothecary even now in this city, who has offered a percentage on prescriptions sent to him, and he has been *specially* lauded, and the people specially requested to purchase medicines of him, by an Editor of a Medical Periodical in this city,—one among several suspicious circumstances. Physicians at times become owners or part owners of apothecary shops, and are thus interested in the prescriptions sent there; but such cases become soon well-known, and almost invariably injure both the credit and the business of such as adopt that course.

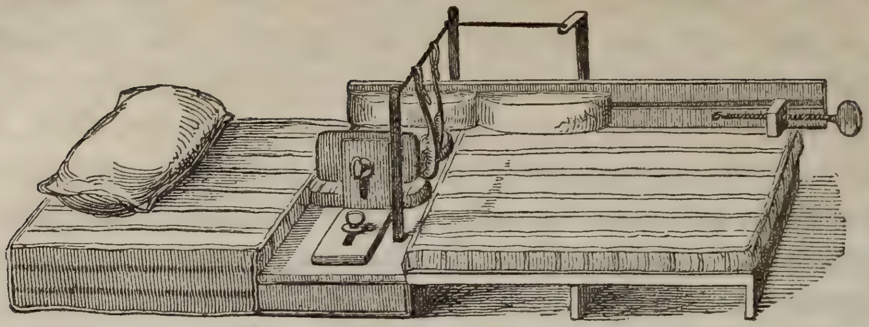
The main fact, that while the two callings are mutually dependant on each other, demanding gentle and courteous conduct on the part of either; that they can never safely be united, but that the apothecary must be the servant of the physician,—if properly appreciated, would appear to be a sufficient guide for the conduct of each in all cases.

BOOK NOTICES.

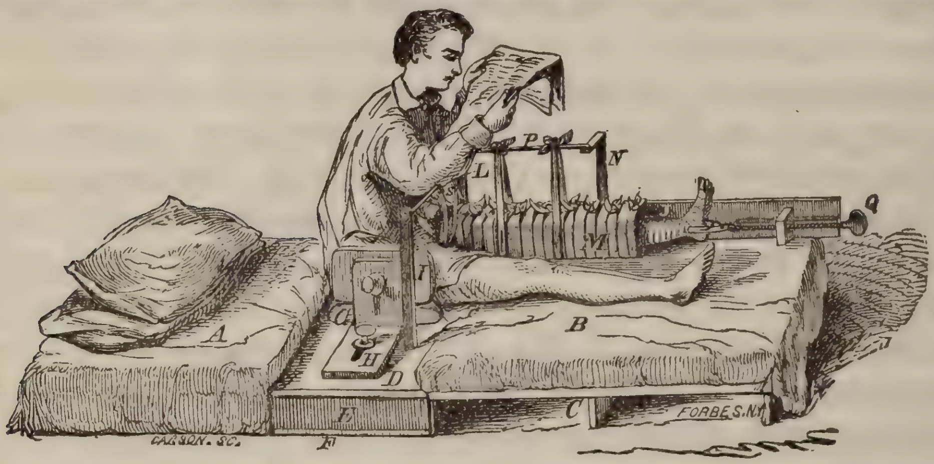
Observations on the treatment of ***Fractures of the Femur,*** with a new Apparatus, and Report of seventeen cases. By Drs. J. H. H. and W. J. Burge. Brooklyn: W. Wilton, 1859.

The above is from the title page of a pamphlet issued to elucidate and recommend an apparatus designed by the Drs. Burge to obviate the difficulties usually encountered in treating fractures of the thigh.

This diagram taken from the pamphlet represents the apparatus.



It is difficult to understand its several parts and principles without figures of reference, which will be found accompanying the next diagram where a patient is seen in connection with it.



A,—is a thick mattress covered by a sheet and supporting the pillows. B—a thin mattress forming the lower half of the bed. C—a wooden platform upon which the mattress is laid. D—central or cushioned platform, supported at either end by wooden strips E, which rests upon a second platform of same extent as D, and constituting a shelf for the bed-pan, which may be introduced below from either side. G, is a firm but easy hair cushion, upon which the hips of the patient rest. This cushion as well as the platform D to which it is fastened, has a semi-circular opening at its lower margin for convenience of defecation. H—a rectangular iron slide, corresponding to its fellow upon the opposite side of the pelvis. These slides are so arranged as to be separated or approximated at will, and by a thumb-screw fixed at any desired point, so as exactly to embrace the pelvis of any patient. A screw—seen to the left of the letter I, passes under the seat of the patient to the long splint J—letter seen near the foot—to steady these pieces in the desired position. A fissure in the perpendicular support allows the splints to be raised or depressed at will, to correspond with the level of the limb. These splints—which are well padded—are mutually transferable, thus adopting the apparatus to fractures of either thigh.

SS are counter extending pads (not well exhibited). These are attached by leather straps to the upper surface of the platform D about twelve inches apart. Passing under the cushion G and becoming well rounded pads, they traverse the tuberosities of the ischia, pass between the thighs and thence perpendicularly to the horizontal iron or cross-bar L. Attached by one extremity of this cross-bar is a rod P, running parallel with and situated directly above the thigh. The other end of this rod is supported by the arched iron rod. N extending upward from the outer side of the long splint J. This is designed to afford special support to the injured limb, and aids in preserving the arched form of the femur.

Q, the screw by which extension is effected. The force is brought to bear by means of adhesive strips which extend upon either side of the limb to near the point of fracture, being kept in place by a roller bandage applied from the toes.

M is an inside splint covered by the bandages. Splints of coaptation are also used according to the exigencies of the case.

Many respectable surgeons have spoken well of Burge's apparatus for fracture of the thigh; and the inventors with satisfaction allude to the results obtained by their machine. One of the claims made for it is the fact that the patient can sit up as much as he chooses, thus relieving the tedium of a continuous horizontal position for a month or two; another is that osseous union is attainable in cases that would otherwise terminate; still another is, that the counter-extending force is made upon the tuberosity of the ischium, thus obviating undue pressure upon the groin. If the apparatus perform the half that is claimed for it, and come in use in a single case, then it pays for itself tenfold, though its cost be forty dollars.

It does not seem, however, that the counter-extending force is sufficiently distributed in the apparatus of Burge. His plan may be better than that of Desault, and Physick, in this respect, yet the pressure should be distributed over a greater surface of the nates. This could be done by means of a wire apparatus moulded to the form of the buttocks. Counter-extending bands of adhesive plaster may also be used to distribute the pressure as well as to obviate the friction of non-adherent material. The counter-force can thus be spread over the buttocks, perineum and adjacent parts, even employing the strips on the anterior pelvic regions.

Instead of the complicated, upholstered, and costly apparatus of Burge, a simple long splint may be used, upon which extension and counter-extension are made through the medium of adhesive strips; and such coaptating dressings as would be needed with any apparatus. A fracture bed may be made of four strips sawed four inches wide from a plank an inch and a half thick. Two of these may be six feet long, and the others three and a half feet. They are to be put together flat-wise by mortise, to constitute a frame; over which sacking, or strong canvas is stretched and secured with tacks. A hole six inches in diameter is to be made in the centre of the sacking, to allow of alvine evacuations, the frame being raised and placed on blocks sufficiently high to slide under it a bed-pan or vessel, when a stool is desired. At other times the frame lies on an ordinary bed, pillows being placed at the head, and a sheet with a hole in it to correspond with the one in the canvas, laid on the frame. This constitutes the simplest apparatus for hospital or country practice. Every part of it can be constructed extemporaneously by the surgeon or the poorest specimen of a carpenter. A common double inclined plane fracture-box, with a side piece extending to the armpit to steady the apparatus, and receive any counter-extending force that may be applied to it, is another very simple apparatus for treating fractures of the thigh, and may be used with perfect success. In bad cases some degree of straightening might take place unless the attending surgeon be watchful to guard against it. This danger arises in part from the facility with which more or less obliquity of the pelvis may occur, concealing the real state of the parts. How often a surgeon treats a fracture of the femur, trusting from appearances that all is going on well, as it may be, until about the time the bony matter begins to be deposited, when through neglect or accident, a half inch shortening takes place, and before complete union is established a quarter inch more intervenes, the patient recovering with the disappointment of having one leg three quarters of an inch shorter than the other! It is for the purpose of calling attention to the importance of the subject of treating fractures of the femur successfully, that this extensive notice of Burge's fracture apparatus has been written. We have never used the apparatus of Burge, therefore cannot speak of its merit and defects as we otherwise might. We have given Burge's diagrams, and alluded to substitutes for the apparatus, trusting that this course would be best for all concerned.

A History of the Discovery of the Circulation of the Blood. By P. Flourens, Perpetual Secretary of the Academy of Sciences (Institute of France), etc., etc. Translated from the French, by J. C. Reeve, M. D. Cincinnati: Rickey, Mallory and Company, 1859.

This little work contains much that is interesting and instructive. In the "History of the Discovery of the Circulation of the Blood" is mirrored the general process by which all great and important discoveries are reached. Great truths in Science are accidentally or suggestively contributed in fragments, as it were, by different individuals; finally some master mind seizing upon the parts of what is to be a great discovery, and contributing as much or more than any other one, completes it. Such was eminently the case in the developmental process which led to the discovery of the circulation of the blood. Galen and others of the classical school had fallen upon a few facts in relation to the movement of the blood in the vessels, but the want of more practical knowledge upon the subject, and the love of theorizing, led them into the most absurd errors. About the commencement of the seventeenth century there was at Padua a celebrated school of medicine, and the study of anatomy had close observers engaged in it. Prominent among these were Servetus, Fabricius, Cæsalpinus, Realdo, Columbus, and Harvey. Fabricius the preceptor of Harvey, discovered valves in the veins, but did not appreciate their real use. Servetus in his quarrels with Calvin, while attempting to locate the seat of the soul, gave clear proof that he understood the pulmonary circulation. Columbus, without a knowledge of the physiological views of Servetus, still more clearly demonstrated this part of the blood's course. Cæsalpinus by calling attention to the swelling of the veins which takes place *below* a ligature, showed that he entertained correct views in regard to the *direction* the blood took in veins, and overthrew the prevailing opinions which were that the blood was sent from the heart to the extremities through the viens instead of the arteries. Harvey, by association with men entertaining such ideas in regard to the circulation, possessed unusual advantages for making a great discovery. These he did not neglect, but gave definite and demonstrative form to, and brought into a harmonious whole, the partial discoveries of his predecessors.

Sprengel bases Harvey's renown upon the circumstance of his having been educated at Padua. But Flourens, as rendered by his translator, thus alludes to the streak of luck. "Undoubtedly this education was a piece of good fortune for Harvey, but it was also, if I may be allowed so to express myself, a piece of good fortune for the circulation to pass into the hands of Harvey, the man most capable of studying it, of investigating it, of comprehending it in all its relations, and of placing it in its true light before the world."

So far as the circulation of the blood was concerned, Harvey left little for those who came after him. But the chyliferous and lymphatic systems of vessels were yet unknown. They and their use were discovered subsequently by Aselli, Pequet, Rudbeck, and Bartholin. The manner of approximating all these important anatomical and physiological subjects is highly entertaining, sufficiently so, at least, to well repay every one for reading this work of Flourens.

Treatise on the Immediate Cause and Specific Treatment of Pulmonary Phthisis and Tubercular Diseases. By J. FRANCIS CHURCHILL, D. M. P. Translated from the French, by a Physician. New York: J. Winchester, 1859.

IN the COLLEGE JOURNAL for July we published an Article on the Hypophosphates, by Dr. Hall, and now we have the memoir in full of Dr. Churchill, who brought the use of the alkaline hypophosphates to the notice of the profession. It is true, that so long ago as in 1848, Dr. Rees had pointed out the existence of phosphorus in the red corpuscles of the blood, and that it was proposed in the year following, by Dr. Beneke, and afterward tried by Dr. Piorry and others, in the treatment of consumption. MM. Barthes and Rillet, who had tried it on children reported that *no* favorable result had been obtained from its use; while Coindet had years ago, cited two cases of tubercular meningitis, cured by this remedy. Phosphate of lime also had an established reputation in Rachitis. But no one had made use of Phosphorus in the *form* proposed by Dr. Churchill, and hence whatever may be the final decision in regard to the value of his opinions, he alone will deserve the credit of originating them. By means of this English translation the profession in America will be able to judge of Dr. Churchill and his discovery;—and we doubt not, in a few years, accurately determine its scientific value.

Contributions to Midwifery, and Diseases of Women and Children, with a Report on the Progress of Obstetrics, and Uterine and Infantile Pathology in 1858. By E. NEOGGRATH, M. D. and A. JACOBI, M. D. New York; Bailliere Brothers, 1859.

THE first Part of this volume is composod of seven Articles contributed to a Medical Journal by the authors;—four by Dr. Noeggrath, and three by Dr. Jacobi. As they have already been before the profession nothing need be said of them farther than that they are worthy of being collected in a book.

The second Part is made up of Reports on the different departments of medical science named in the title, and are of such extreme value as to deserve the highest commendation.

Over one hundred Medical Journals have been consulted for materials for these reports, and the articles they contained have been carefully read; and the ideas contained therein, presented in a concise and clear manner. And the various Medical Books, on the subjects embraced in these reports, have also been carefully examined, so that this excerpt is an admirable one both for the practitioner and the author. But the absence of an Index greatly increases the labor of reading the book, and we would suggest that one be even now prepared. We hope it will prove the first of a series of similar Reports, to be published annually.

Pictorial Edition. An American Dictionary of the English Language, by NOAH WEBSTER, LL.D. Revised and enlarged by Chauncy A. Goodrich, Professor in Yale College. To which are now added Pictorial Illustrations; Table of Synonyms; Peculiar Use of Words and Terms in the Bible; Appendix of New Words; Pronouncing Table of Names of Distinguished Persons; Abbreviations; Latin, French, Italian, and Spanish Phraises, etc. Springfield: G. & C. Merriam, 1859.

WE have received this great work, by some pronounced the *best* Dictionary in the English language; but expecting soon to be able to compare it with *Worcester's*, now in course of publication, we do not purpose at present to give it an extended notice.

The Pictorial Illustrations are said to be over 1.500 in number. They are mostly copies from an *English* Dictionary, and although very good specimens of wood engraving, some appear quiet unsuitable to this work, and particularly as to *size*, as well as the subject illustrated.

On examination, we find the body of the work is from the old stereotype plates of the former edition with but slight alterations, while the additions have been made either in front or in the rear of the pages from the old work.

But we defer any special remarks until we can compare this book with the one forthcoming.

Report on the United States and Mexican Boundary Survey, made under the Direction of the Secretary of the Interior. By Wm. H. EMORY, Major First Cavalry, and United States Commissoner. Washington. Congressional Document. Part II.

THIS is a large quarto work, comprising 567 pages of descriptive matter, and 271 magnificent engravings and lithographs illustrating many of the plants and animals abounding in the neighborhood of the U. S., and Mexican Boundary. It is one of the best and most expensive works ever gotten up by Congress; and it is much to be regretted that such valuable works are not so managed by government that scientific men generally throughout the country may be able to procure them at reasonable rates. The Introduction to the work is by C. C. Pary, M. D.; the description of plants, by John Torrey; of Cactaceæ, by Geo. Engelmann, M. D.; of animals, birds, and reptiles, by S. F. Baird; of fishes by C. Girard, M. D.

PERIODICALS.

Braithwaite's Retrospect of Practical Medicine, for July, republished by W. A. Townsend & Co. New York, as is ever the case, is filled with very valuable practical matter, and of special utility to the active physician.

The British and Foreign Medico-Chirurgical Review, for July, republished by S. S. & W. Wood of New York, fully sustains the world wide reputation of its predecessors.

The London Lancet, for August, still survives the senseless and malicious attack from a neighboring *cur*—no, medical periodical, which is known at home and abroad, by the euphonious name of *Snarle-you.*

The Dental Cosmos, the successor of the Philadelphia *News Letter*, is to be published once a month. Ample provisions have been made to ensure its great utility and value

EDITORIAL ABSTRACTS.

Achillea millifolium.—This plant has often been spoken of in a general way, as of utility in suppression of the lochia and other derangements of the reproductive organs of the female.

Influence of Calomel on the secretion of Bile.—Many have been taught that calomel, if administered when there is diminished secretion of *bile*, is sure to restore that secretion to its normal quantity; and that no other known remedy will with certainty do so.

Dr. George Scott, formerly physician to the Hospital at Renkioi, tried a series of experiments with this mercurial on dogs, and he found all his experiments produced one result, viz:—"a dimunition in the amount of fluid bile and bile-solids, secreted after the administration of large doses of calomel."

MISCELLANY.

COMMUNICABILITY OF CONSTITUTIONAL SYPHILIS.

Until very lately it is well known that Ricord has maintained the doctrine of the non-communicability of syphilis, unless the virus be transferred in its primary form by coition or inoculation. He contended that a person carrying the disease in the "secondary" form—no chancres existing—could not impart it to another indivdual;—that a constitutionally affected nurse could not contaminate a healthy child, nor a syphilitic child a healthy nurse. Nothing can be more important than the truth or falsity of such views. In a recent issue of the *Gazette Hebdomadaire* it is announced that Ricord has abandoned his old notions on this point, and admitted the probability of "secondary accidents." In this connection it may be well to quote from an article on this very subject, (Col. Journal, Dec. 1858, page 535,) by Dr. Jackson. "Of the various ways in which constitutional syphilis may extend itself I have mentioned but few; and these have mostly been adduced to set aright those who blindly follow the dangerous doctrine of Hunter, and to call in question the teaching of another 'lion' in the profession, who has been for years so authoratative from his position, that no man dare believe what he did not, nor investigate what he had left untouched. I refer to Ricord, who has made the medical world subscribe to the theory that the transferable syphilitic virus resides only in the early formed matter of chancre.

"Unless the laws of venereal diseases be well understood, the erronious ious opinion of the physician may become the cause of most aggravated of domestic troubles; and allow innocent parties to suffer to 'the third and fourth generation' when such a calamity might have been avoided.

"In a medico-legal point of view these questions in regard to syphilis become every day more interesting. Suits for divorce on the ground of inconstancy may be begun when the guilt of the parties was in contracting the disease long before the nuptials. Nurses may take venerial from children, and innocently communicate it to their husbands, yet be wrongfully accused of inconstancy."

AMERICAN MEDICAL ASSOCIATION.

We are often amused at the *apologies* presented by the Editors of Medical Journals, for this organization. Among its most staunch supporters are those who observed some features in the organization or the acts of the Association, which they cannot approve. The Editor of the *Medical News*, in an article commendatory and hopeful, cannot let the matter pass without the following remark:—

"We object to the manner in which Committees are appointed, and contend that under the present practice an empiric may be named as a Committee of one to report at an ensuing meeting upon a grave medical or surgical subject by simply intimating his willingness to enlighten the benighted medical profession.

We object, also, to the manner in which gentlemen become members of the Association. As it is, the abstract fact of being a member, is not more than presumptive evidence of being entitled to the name of doctor. We will go farther, and assert that *all members are not, even now, doctors of medicine.*"

Will our neighbor, the *dagger Editor* of the Lancet and Observer please observe this, and as he has taken the Association under his special guidance, *reform*—no—he hates that word, change, this matter entirely.

PERVERTED TASTE.

Von Troil informs us that the Icelanders, when there is a scarcity of fodder, feed their cattle with *sternbitr*, (a kind of fish) which, together with the heads and bones of cod, is beaten small, and mixed with one quarter of chopped hay. He adds, that the cattle are fond of this food, and yield a good deal of milk after having used it. For a similar reason, says Prof. Barton, deer have been frequently known to feed on dead fish that are washed up on the banks of the Susquehanna and other rivers. Spallanzani tells us, that by dint of hunger he brought a wood pigeon to relish flesh so well, that it refused every other kind of sustenance, even grain, of which it is naturally so greedy. Certain other animals are likewise capable not only of changing their accustomed diet, but sometimes acquire so vitiated a taste, as to refuse their former food. Man is the most easily perverted in taste. There is scarcely anything digestible but he can learn to relish. This capacity enables him to obtain a subsistence in every region of earth; and permits him to inflict upon himself a host of bad habits.

MAL-PRACTICE IN TOOTH EXTRACTING.

A singular case of alleged mal-practice recently came before a magistrate in East Corinth, Maine. Mrs. Butler, of Charleston, employed Dr. Phipps, of Bradford, to extract a certain upper molar tooth, which had been the cause of much physical suffering. Sometime subsequently she recognized "the same old ache," which led to an examination, and the discovery that a sound and valuable tooth had been wrested from her. For this loss she claimed damages to the amount of twenty dollars. The defense was, that the lady fainted during the operation, and the instrument slipped on the wrong "grinder." Several physicians testified that "mistakes will happen among the best of folks," so the magistrate decided the case in favor of the defendant.

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ORIGINAL CONTRIBUTIONS.

MEDICAL VAGARIES.

BY H. G. BARROWS, M. D.

The ancient soothsayers attributed many mystic properties to the *coral*, and it was believed to be capable of driving away devils and evil spirits; hence arose the custom of wearing amulets composed of corals, around the neck, and of making crowns of it.

Pliny and Dioscorides are very loud in their praises of the medicinal properties of this substance, and Paracelsus says that it should be worn around the necks of infants as an admirable preservative against fits, sorcery, charms, and even against poison. It is a curious circumstance that the same superstitious belief should exist among the negroes of the West Indies, who affirm that the color of the coral is always effected by the state of health of the wearer, it becoming paler in disease. Many of the practices which superstition has at different times suggested, have not been alike absurd; nay, some of them have even possessed, by accident, natural powers of considerable efficacy, while others, although ridiculous in themselves, have actually led to results and discoveries of great practical importance.

The most remarkable instance of this kind upon record is that of the *sympathetic powder* of Sir Kenlem Digby, Knight of Montpelier. Whenever any wound had been inflicted, this powder was applied to the *weapon* that had inflicted it, which was, moreover, covered with ointment and dressed two or three times a day. The wound itself in the mean time was directed to be brought together and carefully bound up with clean linen rags, but above all, was to be let alone for seven days. The triumph of the cure was attributed to the mysterious agency of the sympathetic powder, although it can be readily seen that the wound healed up by the ordinary efforts of nature.

This superstitious practice is repeatedly alluded to by the poets. Sir Walter Scott speaks of it in his celebrated poem "The Lay of the Last Minstrel."

"But she has taken the broken lance,
And washed from it the clotted gore,
And salv'd the splinter o'er and o'er;
William of Doloraine, in trance,
Whene'er she turned it 'round and 'round,
Twisted, as if she gall'd his wound;
Then to her maidens did she say,
That he should be whole man and sound."

Dryden has also introduced the same superstition in his "Enchanted Island."

"Anoint the sword which pierced him, with this weapon salve,
And wrap it close from air, till I have time to visit him again."

Homer speaks of applying the rust of the spear of Telephus as a cure for the wounds it inflicted. This rust was probably no more nor less than "verdigris" which may have led to the discovery of *its* use as a surgical application.

Celsus mentions, as a cure for epilepsy, the warm blood of a recently slain gladiator, which was adopted, and with success, by several physicians. A remedy so revolting must require great faith to induce one to submit to it.

Homer tells us in another place, that the bleeding of Ulysses was stopped by a charm. This superstition is not confined to the ancients, for something of it is to be found as late as the seventeenth century, for instance:

"Tom Potts was but a serving man,
And yet was a doctor good:
He bound his 'kerchief on the wound,
And with kind words he staunch'd the blood."

The kind words referred to were the supposed charm, but there is no praise given to the 'kerchief which was bound around the wound. Sir Walter Scott refers to the same thing in one of his poems.

"She drew the splinter from the wound,
And with a charm she staunch'd the blood."

Sennatus also informs us that the ancient surgeons had recourse to prayers and magic for the extraction of foreign bodies from wounds.

Zimmerman likewise tells us, that in Chili the physicians blow around the beds of their patients to drive away diseases; and as the people in that country believe that physic consists wholly in this wind, their doctors would take it very ill, if any person should attempt to make the method of cure more difficult. They think they know enough when they know *how to blow.* We have doctors in our day well versed in the art of *blowing*, if we may judge from their empirical advertisements. Aristides was the dupe and victim of the Asclepiades for ten successive years. He was alternately purged, vomited, and blistered; made to walk bare footed under a burning sun in summer, and in winter he was doomed to seek for the return of health by bathing his feeble and emaciated body in the river. All this severity, he was made to believe, was exercised towards him by Esculapius himself, with whom he was persuaded to fancy he conversed in his dreams and frequently beheld in nocturnal visions. One day, the god, fatigued, as it was said, with the importunities of his votary, ordered him to lose an hundred and twenty pounds of blood; the unhappy man not having so much blood in his body wisely took the liberty of interpreting the oracle for himself and in his own way, and parted with no more than he could conveniently spare.

In the follies of ancient medical theories even the simple article of *sugar* has not escaped their venom. A certain Dr. Wallis raised a popular outcry against its domestic use, declaring that it contained within its particles a secret acid, a dangerous sharpness, which caused scurvies, consumption, and other dreadful diseases. This produced a pamphlet from Dr. Hare, entitled "A Vindication of Sugar against the charge of Dr. Wallis and others," dedicated to the ladies.

The common magnet, or loadstone, in powder, has entered as an article into the list of medicinal agents anciently in use. When Porsenna stipulated with the Romans that they should use no more iron, except in agriculture, Avicena was so alarmed at the idea of its internal use as a remedy, when given in substance, that he seriously advised the exhibition of a magnet after it to prevent any dreadful consequences. The magnet also entered, in powder, into the composition of various *plasters* to draw bullets, and arrow heads out of the body.

Another superstition may be found in various black letter works on Demonology, where we are assured "that three scruples of the ashes of a witch, when she has been well and carefully burnt at the stake, is a sure catholicon against all the evil effects of witchcraft." How badsoever this disease of witchcraft may be, I think I should have *many scruples* against taking three scruples of a burnt witch.

AN EXAMINATION OF THE SELF-LIMITATION OF DISEASE.

BY PROF. J. EMERSON KENT, M. D.

Probably no fallacy taught by the Faculty, has exercised a more pernicious influence upon medicine as a science, or been productive of more lamentable results upon the patient, than the doctrine that almost all diseases are self-limited; that in so far as duration is concerned, "they cannot be arrested in their course when once fastened upon the system." As this doctrine is one of much interest, alike to the profession and the patient, I propose to examine its tenability, and to expose its general fallacy.

That diseases have a tendency to become exhausted under the recuperative powers of the system, is indisputable; but in all such cases I maintain that their limitation or duration is determined rather by the power of the organism to overcome the febrile disturbance upon which the disease depends for its perpetuation, than by any inherent law of self-limitation.

In the language of Liebig, every substance or matter, every chemical or mechanical agency, many of the mental emotions or passions, which change or disturb the restoration of the equilibrium between the manifestations of the causes of waste and supply, in such a way as to conjoin its actions to the causes of waste, *is a cause of disease.* Disease occurs when the sum total of vital force which tends to neutralize all causes of disturbance, is weaker than the acting cause of disturbance. If in consequence of the abnormal transformation of the living tissues, a greater amount of force is generated than suffices for the production of the normal motions, it is seen in an acceleration of some or all of the involuntary motions, as well as in a higher temperature of the diseased part; *this condition is called fever.*

When a great excess of force is produced by change of matter, the force, since it can only be consumed by motion, extends itself to the apparatus of voluntary motion; this state is appropriately called a *febrile paroxysm.*

Disease is, therefore, a simple repetition of disordered action, manifesting through its whole course *paroxysm* and *remission.* If the disease is continued from day to day, or from week to week. it is because, as the disorder progresses, the paroxysm or exacerbation becomes, with each repetition, longer in duration and more severe in character, the remission becoming in the same proportion shorter and less marked.

A disease is limited in duration from two causes:—first, from the power of the *vis medicatrix*, whereby the paroxysms are controlled, and the intermissions prolonged into convalescence, or health;—and, secondly, by the the inability of the recuperative powers to resist and overcome the paroxysmal disturbance; when, as a natural consequence, the paroxysms are repeated with increased intensity, until the system sinks beneath the disorder. But this is not the self-limitation of the schools,—far indeed from it; for, disease is only an abnormal periodicity of the organism, produced by a disturbance of the equilibrium of the self-limitation of ordinary disease.

The skill of the physician in the treatment of any form of disease, is manifested in his knowledge and use of the means which enable him to exercise a favorable influence on its duration, and in the removal or modification of all the disturbing causes whose action strengthens or increases the actual morbid developments; or, in other words, it consists in the reproduction of an equilibrium of the vital forces—a restoration of the *normal* temperature, periodicity, and functional movements of the whole organism; a complete cure of disease is effected when external action and resistence in the diseased part are brought into equilibrium.

It is not my purpose to subject the febrile eruptive diseases to examination. I shall confine myself to that numerous class of disorders, which by authors are designed *self-limited*, and which are wholly distinct from the febrile eruptive form. And, first, whooping-cough demands consideration; says Dr. Carpenter,—"this disease makes its attack not unlike a severe cold. The symptoms, in the earlier stages, are very similar in the two diseases. As it progresses, the cough becomes more urgent, complicated with spasms of the throat, glottis, and sometimes the stomach. Important organs, especially the lungs and eyes, are often affected, and sometimes very severely. It has its regular increase and decrease, of about six weeks each. * * *Do what you may you cannot arrest its course: you may mitigate its severity, but nothing more.*" In this expression Dr. Carpenter only re-echoes the general opinion of the profession. We emphatically assert that whooping-cough has been, in numerous cases, promptly *arrested in its course*, and therefore must not longer be called a disease of self-limitation. I have, in scores of cases, at once broken up this harassing disorder; nor am I alone in the attainment of this result, for Dr. Churchill, of London, thus writes;—*Journal of Medical Science*, August, 1853.

"Case 1st. Miss D. aged sixteen, had had whooping cough a month, when I prescribed chloroform. There was no complication, but the whoop was frequent, especially during the night. She was directed to have the chloroform in readiness, and to use it with each paroxysm; in two days the whoop ceased. The cough lasted a few days longer, but it was slight, and not in whoops, or kinks."

CASE 2nd. Miss A. aged twenty, had been ill with whooping-cough for about three weeks, when I prescribed chloroform. Two days sufficed with her, also, to relieve her of the whoop, and the slight cough which remained, subsided after a week or ten days."

"In these cases," says Dr. Churchill, "the effect seems quite magical; both had the disease well marked, and the families of both were prepared for a disease of two or three months' duration, as was the case with their other children."

The above facts, and they might be largely multiplied, afford ample proof that whooping-cough is not a self-limited disease; that there is no *real* occasion for its regular increase and decrease of about six weeks each, aside from the ignorance or cupidity of the practitioner. Let it be universally proclaimed that whooping cough,– that harassing and distressing disorder of which the "regulars" say, "you cannot arrest it in its course"—can be promptly arrested; that its paroxysms may be at once subdued and the progress of the disease cut short; and even when complicated with pneumonia, bronchitis, and other (so called) inflammatory diseases, attention to the paroxysmal character of the disorder, and the exhibition of the appropriate remedies (remittents during the paroxysms, and intermittents in the remissions) will in every instance effect a cure, whenever a cure is attainable, without the use of the lancet, antimonials, calomel, or any other depleting or prostrating agency.

Let us next examine Typhus Fever and ascertain in the light of true philosophy, whether it is a disease of self-limitation, or a disorder capable of being promptly arrested, whenever and wherever philosophically and scientifically treated. That the authorities include typhus fever among the diseases of self-limitation, is a matter of notoriety,—thus write they; "Typhus fever usually runs its course in from forty to a hundred and twenty days, and, in common with all our summer and autumnal fevers, when fairly fastened upon the system, *will run their course uninfluenced*, so far as duration is concerned, by every known medical agent." Is typhus fever a disease of self-limitation, or, in other words, must it run a definite course before it terminates? In answering this question I shall cite two authorities only, but they might be multiplied largely. Says Surgeon Ross, in the *London Lancet*, 1843: "My observations have proved to me, most unquestionably, that not only are there daily exacerbations in typhoid fevers, but also intermittent periods of the quartan type, defined by an augmentation of all the febrile symptoms." Acting upon this unquestionable fact, he has given us the result of the treatment of a large number of cases, in the following words:—"The foregoing cases are selected from among the worst which came under my notice, and demonstrate most clearly the correctness of my data. The convalescence was in every case remarkably brief, for the patient was commonly restored to his usual health in the course of a week. The disease was incontestably shortened in every case, and the dogma that typhus is a disease which must run its course despite our various resources, is no longer of any authority."

Says Surgeon John Findlay, R. N. (*London Medical Enquirer*, 1850,) writing from the African coast;—"Epidemics we do not lack—and although not molested by influenza, or cholera, we have a far fiercer enemy to contend with, in the shape of bilious typhoid fever. During the last three months I have had sixty-six cases, without losing one. My treatment is to give large doses of quinia; *this knocks the disease on the head at once*, and your patient recovers—not a blanched and wretched remnant of humanity,—but in a few days as useful as ever."

For the last eleven years, I have rarely found typhus fever continue beyond the second quartan period, and in a majority of cases convalescence has been established on the fifth day.

ÆSCULUS GLABRA—BUCK-EYE.

BY JAMES CROOKS M. D.

This tree grows spontaneously in the Western States, and is mostly confined to bottom lands along streams, and produces the surest crops of fruit of almost any other tree, and very often to the chagrin of the farmer. The community look upon it as entirely useless, not thinking that the Grand Architect of the Universe created nothing that is not fit for man's uses.

This tree is so well known that in this place it needs no description. It is well proven that the bark of the root and seed have strong narcotic powers, (I think the class of inebriants). It acts on all vertebrate animals, from the highest down to the lowest grade, the fish; producing drunkenness on all such animals as eat of it, and some by mere inhalation, as I will directly show. Cattle are extremely fond of the seed or root. In some cases I have seen the first shoots and leaves in the spring, (it is about the first to put out,) produce complete drunkenness on cattle. But they generally become intoxicated by eating the nut. It seems that those that have once indulged, return to it as the dog to his vomit, or the toper to his bottle. When the animal is under this narcotic influence, the eye exhibits the same appearance as that of an inebriate. There is considerable anxiety manifested, and when the animal eats enough to overcome the nervous powers he will get down, and should he be helped up he is inclined to get down again, and lie on the side he has lain on.

I have used the pounded bark of the green root to produce inebriation in fish, by washing the bark at shallow ripples of streams, and when the extractive is thoroughly mixed with water the fish are acted on by its coming in contact with the gills, which serves the same purpose to a fish that the lungs do to man. We might properly say that they receive it through inhalation, which may be some proof to substantiate Prof. Cleaveland's theory advocated in the June No. of the College Journal of the present year. If we can receive deleterious substances by inhalation so as to produce disease, why not on the same principle (to some extent) take remedies to overcome the discracy. About thirty years since, my Father, Dr. Wm. B. Crooks, first taught the method of taking fish by "*buck-eying*" as it is called. He placed the green root of the tree in water, and the fish soon became so intoxicated as to be easily caught.

It is my opinion that this species of Æsculus will yet prove a fine remedial agent where a narcotic is needed. In Griffith's Medical Botany there is an account given of some experiments made by Dr. McDowell; he tried the powder of the rind in some cases, and states that ten grs. of it were equivalent to three grs. of opium. A strong decoction of the bark has been recommended as a lotion for gangrenous ulcers. The fruit contains a large quantity of fine starch which is thought to be superior to that made from wheat. I think that the day will yet come when the buck-eye, which is so much persecuted by farmers, because of their intoxicating properties (where their cattle carouse and get their drooping spirits raised) will be investigated, and be valued in a commercial point, on account of the abundance of starch that will be manufactured from it.

CASE OF STABBING.

BY W. N. FORBES, M. D.

On the 8th of July I was called to attend a man who had been stabbed in an affray. The knife entered in four different places. One cut was not serious; there was a deep wound in the arm, and a third in the gluteal region; the fourth and principal cut was in the left side below the diaphragm, the knife entering the descending colon. Some hemorrhage took place into the cavity of the bowels, as was shown by blood passed at stool. The wound in the abdominal walls was triangular, through which the omentum protruded. Having returned the protruding mass, I closed the opening by using sutures. I also employed sutures to close the other wounds, but used none to close the rent in the intestine. The water dressing was applied to subdue the inflammation; and opiates were given to check the vermicular action of the bowels, the dangers of the wound in the colon being particularly threatening. I kept the patient pretty well narcotised for fourteen days; and allowed little nourishment except barley water. During the latter part of the convalescing stage, beef essence was permitted for diet. On the twentieth day the patient was able to walk about. The man was about forty-five years of age.

FORM.

BY ISAAC H. KEARNS, M. D.

We can obtain no idea of quality, without reference to form. All manifestations of whatever kind, are predicated upon form. Even the impressions of things visible upon the senses, and of ideas upon the mind are the result of change in the form of the organ acted upon. As is well known, color, a quality which apparently has no relation to form, depends entirely upon the form of the ultimate particles of matter; every substance having the power to absorb some rays and to reflect others, and this in endless variety.

The character of each of the mineral substances is determined by the form of its crystals or ultimate particles. The forms assumed by vegetable substances give the qualities and characteristics of that kingdom. And the forms into which are thrown the receptacles of animal life, from the simplest possible animal organism, up through all the gradations of development until we reach man, the most perfect of all earthly forms, are strictly indicative of the character possessed by each.

A recollection of what peculiar qualities accompany particular forms, and the application of this knowledge to medical diagnosis, would materially assist in simplifying rules for this important pre-requisite to medical treatment.

Were our understanding of *form* in its broadest sense as complete as intelligent microscopic observation is yet destined to make it; each individual in a state of health would be a standard by which, not only his own idioscyncracies and constitutional diathesis could be pointed out, but any departure from a normal condition at once determined. For, *disease is a change in the form at the point where the lesion exists.* This is presented as an axiom which cannot be burned up by the light of any lens which can be brought to bear upon it. And as a means of simplifying the attainment of correct medical diagnosis this idea is offered to the reflecting readers of the College Journal, without occupying the time and space to carry out the deductions resulting from the premises. Excepting, perhaps, to remark that in health there is an equilibrium between all the parts of the entire system, the form of each is perfect; every cell, every follicle, and gland occupies its proper place and completely fills the measure of its duties. Any departure from the true normal form, must be disease or its manifestation. The detection of such change whether external or internal, whether general or special, and an understandig of the consequent pathological condition, must measure the skill of the physician.

RHEUMATIC METASTASIS.

BY J. DAVISON, M. D.

Few diseases perplex the young practitioner more than the treatment of severe cases of Inflammatory Rheumatism. This perplexity is not altogether owing to the peculiar nature of the complaint, but in a great measure to the discordance in the plans laid down in the books he may consult for his guidance. One author recommends the sudorific plan, another the calomel and opium plan, a third colchicum, a fourth macrotrys, a fifth a combination of plans; then we have the purgative treatment, the *acid* treatment; and lastly the latest importation from the London hospitals, the *alkaline* treatment.

Confused and embarrassed, with no experience to guide him, the tyro tries one remedy after another, until to his surprise metastasis takes place to some vital organ, and his patient is in imminent danger.

I have had two cases this spring of the fibrous form of inflammatory rheumatism, and in spite of the persevering trial of various remedies, metastasis took place in both cases, accompanied with great irritability of the stomach. In the first case the metastasis was to the heart, and was caused by the use of iodide of potassium in grain doses every two hours, with mucilaginous diuretics as drink. In the second case the stomach was attacked, and I will give it in detail.

Margaret G., aged 20, after a stage ride of fifty miles, took cold and was attacked with rheumatism of the right knee and neighborhood, on the 11th of June, 1859. She complained of swelling and pain, bowels had not moved in a week; tongue covered with a dirty white fur; skin moist with acid perspiration, (she had taken sweating medicines the night before without relieving the pain);—pulse full, and one hundred beats to a minute; fever, headache, and great thirst. I ordered one drachm comp. powd. jalap, with ten grains bi-carbonate soda, to be repeated every five hours until it operated on the bowels; and to the painful limb a fomentation of hops boiled in alkaline water, to be changed when cool.

June 12th. The physic operated three times; pulse eighty-five; tongue cleaner; the pain had nearly left the right leg and gone to the left one. She felt better, and the pain was altogether less than yesterday. To keep up a determination to the surface, and lessen the pain, I ordered one fluid drachm of the sudorific tincture, in sage tea, once in six hours; and for the alkaline and inflammatory condition, iodide of potassium in three grain doses once in six hours, alternately. Continued fomentations.

June 13th. Pain and swelling gone; a little stiffness remaining. Altogether better. Continue treatment.

June 14th. Pain and stiffness gone entirely, bowels regular, tongue clean, pulse seventy-five and weak. She was listless and drowsy; had vomited the sudorific tincture every time she took it, and complained of nausea. Discontinued the sudorific; reduced the iodide one half, and ordered a sinapism to the epigastrium, and a tea of parched corn for drink.

June 15th. Tongue slightly coated white; vomited two or three times; stomach rejected the iodide of potassium. In other respects, the same as yesterday. Not suspecting metastasis, and supposing the iodide was acting as an irritant, I discontinued it and ordered five grs.

of sub-nit. bismuth and one fourth gr. of morphia to be given in starch water, and the starch water to be used as a drink repeatedly.

June 16th. The same as yesterday, but more restless, and had vomited everything she had taken. The friends called in an older physician, and I retired.

June 20th. I was requested this evening to take charge of the case again as her late physician stated that she would die before morning. I learned that the treatment for the last four days had been for the purpose of checking the vomiting. Bismuth, peppermint and laudanum, morphia, strong coffee, cinnamon decoction, Johnny-cake tea, minute doses of lobelia, a combination of rhubarb, soda, and peppermint leaves, a blister over the stomach (which was still discharging) had been tried in vain. She had had no movement of the bowels for four days, and the urine was retained so that the catheter had to be used twice a day. I found her pulse very weak and intermittent; low muttering delirium; cold extremities; retention of urine and feces; a burning pain in the stomach; constant vomiting and craving for cold water; tenderness of the epigastrium, and over the region of the heart; blindness, so that she could not distinguish her friends at the fireside. She had not taken any nourishment for five days, and was unable to sleep or rest in any position even for a few minutes.

In this desperate state of affairs I determined to lay authors and their theories to one side—not to depend on my memory, but take the symptoms as my guide, and address remedies to them. Sudorifics the stomach would not bear—nor much medicine of any kind. But I thought stimulants, anti-emetics, revulsives, and something to overcome the paralytic condition of the bladder and bowels were demanded. The blindness I thought was merely a sign of a more general paralysis of the nerves.

After considerable reflection I ordered mustard plasters to the whole length of spinal column, and from the knees to the toes, to be removed for half an hour only when she complained loudly, and then to be replaced. A poultice of bruised garlics was laid over the bladder. I used a strong injection, composed of milk and water, to every half pint of which I added a table-spoonful of salt and a tea-spoonful of cayenne pepper. This was retained as a counter-irritant to relieve the stomach. As a stimulant and anti-emetic I used a mixture of brandy, eggs, and nutmeg, in tablespoonful doses every six hours; and to relieve the paralytic condition I gave a solution of strychnia, in doses of one twentieth of a grain, once in six hours, alternating with the brandy mixture. The blistered surface I kept discharging by means of cabbage leaves.

Early the following morning a minister and myself were summoned to see her die. She was apparently worse, but on inquiry I found that she had not vomited during the night, and that she had slept an hour or two. I therefore encouraged her friends and told them to continue the treatment.

For three days I administered the injections and used the catheter twice a day. During this time there was but a slight improvement, except that she never vomited, and was able to sleep several hours in the day. I cautiously increased the dose of the strychnia until she took one tenth of a grain for a dose, and continued the other treatment. At this time I was urged to give her cathartics and diuretics, but not daring to change the treatment while she improved the slightest, I adhered to my first prescription, and felt confident that it would succeed.

On the fourth and fifth days from the time I was re-called I changed the milk and water injection for one of boneset, senna, castor oil and spirits of turpentine; and ordered a fomentation of hops to the vulva an hour before I used the catheter, but continued the other treatment. At this time a rapid improvement took place. Her strength increased; the pain left her stomach; appetite good; the bowels and bladder performed their duty; and the delirium and blindness gradually passed away. I continued the same internal remedies in small doses, and in a few more days she was out of doors and entirely well.

Notwithstanding I used the hot enemas for four or five days, such was the morbid insensibility of the rectum, that not one of them was returned, they were all retained.

YEAST AS A TEST IN DIABETES.

BY J. R. WHITE, M. D.

In Wood's practice is the following statement: "As the saccharine taste is not always very obvious, and the application of this test at best is not very agreeable, it is important to possess some other means of detecting the presence of sugar. This may be done by a very simple process. Like other liquids containing sugar, diabetic urine is capable of undergoing the vinous fermentation upon the addition of yeast, and at a suitable temperature. No such change takes place in healthy urine under the same circumstances. To test the urine, therefore, nothing more is necessary than to add yeast, and expose the mixture to a temperature of 70° or 80°. If it be diabetic, an effervescence will rapidly commence, gas will escape, and the liquor will acquire a vinous odor. Dr. Christison says, that he has thus detected one part of diabetic urine in 1000 parts of urine."

Now, I have reason to believe that the above test is not to be relied upon implicitly as a test in urinary difficulties. In July 1858 I had a case present for treatment, possessing many of the appearances of diabetes. I tested the urine in accordance with the above plan, and to my regret fermentation was soon fully developed. Of course I set it down as a case of aggravated diabetes. But it occured to me that I would try the application to healthy urine and, much to my surprise the results were identical, and the same in several instances. The case first spoken of proved to be *enuresis*, and yielded to the use of belladonna. As it is as desirable to expose a fallacy as to maintain a truth, I hope that this may be the means of others investigating the subject.

GONORRHŒA.

BY A. B. JACKSON, M. D.

Having made some general remarks in the preceding number of this Journal, concerning the early peculiarities of gonorrhœa, I propose in this article to set forth my method of managing the disease, as well as to express a few objections to the common treatment.

It is lamentably true that physicians are liable to fall into the error of seeking for "specific" remedies when gonorrhœa is to be encountered. Whether this fatuity arises from the prevalent notion that the disease is *specific*, I am unable to say. But certain it is that copaiba has become as intimately associated with gonorrhœa as quinia with intermittent fever. Copaiba in capsules, emulsion, paste, or pills, is the clap-cure all over the world. It is not only given by the stomach, but of late has been injected into the urethra. Every pimp and druggist's clerk in the land has a *choice* prescription for a copaiba mixture; and the breath of many young men is fragrant with the drug.

Copaiba acts as a powerful stimulant to the mucous surfaces, especially those of the urinary apparatus. Therefore, after the acute symptoms of gonorrhœa have passed, the medicine may exert a favorable influence; before that time it is not indicated. Its influence reduces the *ardor urinæ*, yet liquor potassæ for that purpose, is more efficacious.

Both increase the urinary secretion, and by diluting its acrid principles, modify its irritating effects upon the urinary passages. It has been thought, too, that some portion of the remedy passed through the kidneys, and served in a measure to *shield* the inflamed urethra from the contact of the urine. Several of the balsams and the terebinthinates are reputed to operate in a similar manner. As copaiba is disagreeable to the taste, or becomes so after its use has been continued for a few days, it is usually mixed with such articles as disguise its flavor, and give it the consistency of an emulsion or paste. Either of the compounds made after the formulæ in King's American Dispensatory, under the head of "Mistura Copaibæ Composita," is perhaps as desireable as any of the kind ever devised.

In the management of gonorrhœa very little depends upon the quantity or quality of the copaiba mixture. The secrecy in which some physicians hold their recipes for the treatment of gonorrhœa, is amusing; and calls up the mental inquiry,—is it possible for a practitioner to entertain the idea that his formulæ are more valuable than a thousand others in common use? If so, let him "compare notes" freely with his cotemporaries, and I will guarantee that his conceit will "vanish into thin air."

Copaiba after being used for some days or weeks, deranges the stomach and bowels, and by irritating the urinary tracts, prepares the way for gonorrhœal inflammation to extend itself. Frequent and painful micturition is often brought on by the improper use of the drug. The medicine, too, may cause an unsightly eruption to appear upon the skin, constituting accidents which, besides their physical inconvenience, excite much mental distress. The patient, in his ignorance of the nature of the affection, takes the alarm that the disease is becoming constitutional. In not a few instances this anxiety is more difficult to remove than the morbid physical phenomena.

The Canada balsam (*Pinus balsamea*) is often used in place of copaiba, not only as being a more valuable remedy, but as a substitute when a change of medicines is desireable. The balsam has, however, it may be needless to say, some of the objectionable qualities that belong to copaiba. The drug, as it is found in the shops, may be made into an emulsion, as follows:

℞. Canada balsam, f℥j.
Pulv. acacia, ℥ij.
Camphor, ʒj.
Sugar, ℥jss.
Liquor potass. fʒj.
Comp. tinct. lavand. f℥j.
Lime water, f℥vi.

The balsam and the acacia are to be rubbed together in a mortar, then a part of the lime water and the camphor can be incorporated with the mass; finally all the other articles can be added, and be made to mix by shaking. The emulsion may be flavored with wintergreen, sassafras, or spearmint, if it be very disagreeable to the taste of any one. The mixture may be given in teaspoonful doses three or four times a day, after the most acute symptoms of the disease have passed.

Instead of using any balsamic, terebinthinate, or other active diuretic medicines in the early stages of gonorrhœa, I commonly treat the disease as though it were simple urethritis. I pay no attention to old notions about *specific* diseases and *specific* remedies. The difficulty is a high grade of local inflammation, therefore antiphlogistics topically applied will most certainly fulfil the indications. Water—cold or warm, as is most agreeable to the patient—thrown into the urethra by means of a common penis syringe is a powerful antiphlogistic. A drachm or two of fluid may be injected at once, and the operation is to be repeated often. After the nozzle of the syringe is carried well into the meatus the end of the penis should be pressed against it with the thumb and finger to prevent the injection from flowing out as fast as it is thrown in. The syringe may be removed as soon as its contents are discharged, but the fluid is to be retained in the urethra for five minutes, the meatus being closed by the pressure of the thumb and finger. Much depends upon attention to these seemingly unimportant matters.

A brisk cathartic administered early, assists in subduing the violence of the disease. After this has operated, Indian hemp or gelseminum is to be given in repeated doses until the inflammatory symptoms have subsided. Lastly buchu or the sulphate of bebeerina, may be taken to restore the natural tone to the debilitated urinary organs. All these remedies are to be prescribed in ordinary doses, and in the forms they are usually employed. A *fluid extract* of hemp, a *tincture* of gelseminum, and a *decoction* of buchu, are commonly used.

A cold infusion of golden seal and wild cherry bark, instead of water, is to be injected into the urethra, as soon as the acute symptoms begin to subside. Generally the substitution may be made on the fourth or fifth day, the tonic injection then being continued until a cure is effected. When this will be it is impossible to state, though the patient be extremely anxious to know. Prof. Cubebs tells his class every year, that he does not ask but four or five days to cure gonorrhœa; and his hearers treasure up his recipes with avidity, implicitly believing that they have obtained the art. Alas for such impudence and credulity!

Gonorrhœa is not an easy disease to overcome. I regard it as one of the most perplexing maladies that the physician is called upon to treat. Occasionally the disease will yield in a few days under almost any management; and will even get well sometimes without medication. The popular notion prevails that it will "run itself out;" and so it may, yet it is very likely to result in a stricture of the urethra. The infectious character of the disease runs out, but a gleety discharge depending upon secretory irritation, or a chronic state of congestion at two or more points along the urethra, is the common termination of a let-alone cure.

In unusually bad cases, the penis being swollen and having a hard lump in it which threatens abscess, the patient should take the bed, and apply to the effected organ cloths wrung from hot water. Hot applications—not *warm*, as these act too much like a poultice—discuss acute inflammatory tumors, thereby obviating suppuration. Hot medicated fomentations can be employed when the patient has little confidence in water, and great confidence in everything bearing the semblance of medicine. By taking advantage of such popular notions, the physician will be more sure to have his directions carried out faithfully. The hot applications should be frequently renewed, at least often enough to avoid the tepid dressing. So far as injections and internal treatment are concerned, the course already pointed out may be the best. No wash that is likely to arrest the discharge suddenly, or give a shock to the nervous system should be employed, lest a swelled testicle or a morbidly sensative knee follow.

The diet of a gonorrhœal patient may be that commonly used in a state of health, unless the local disease create a general fever. No spirituous or malt liquors are to be drunk. Of the fermented drinks, cider is the least objectionable. Excesses of all kinds are to be shunned. Late suppers, hunting and fishing excursions, and sexual intercourse, are sure to aggravate the disease; and may bring on a relapse after a cure was apparently reached.

Chordee.—A frequent and distressing complication of clap, is chordee. This usually comes on in two or three days after the first appearance of the gonorrhœa, and may continue until it is the last symptom of the disease. For the first few days of its existence the distress attending it is the worst; and is felt only while an erection is on, consequently very little inconvenience is experienced from it during the day. But as soon as the patient takes the horizontal position, and becomes warm in bed, an erection accompanied by the very keenest pain, takes place; and if subdued temporarily by a dash of cold water, is sure to recur before sound sleep is reached. Again and again will the sufferer spring from his couch and plunge the insubordinate organ in a basin of water. The relief, though temporary, is almost instantanious; and the victim to the unwelcome malady, lies down with the vain hope that his repose may be undisturbed. No better success, however, attends this effort to sleep; but night after night passes without that refreshing slumber which is necessary to health and vigor. The patient at length gets desperate, and imperiously demands relief.

Several remedies sustain the reputation of alleviating the symptoms of chordee. In fact, any agent that will prevent erections or lessen the tendency to such a state, relieves paroxysms of chordee. Lupulin, camphor, and belladonna are the most efficient anti-chordee medicines known. These agents are powerful sedatives, and especially control erethism of the genital organs. I regard lupulin as the most valuable, but I often combine it with camphor and belladonna. A formula may be given for the preparation of a pill, which has combined in it these three remedies:

℞. Lupulin, ℥ss.
Pul. camphor, ʒjjj.
Ext. belladonna, ℈jj.

M. ft. pil. No. CXV. Dose from four to six pills upon going to bed.

If lupulin alone be given, the dose is from the half to a full drachm, always to be taken at night. It may be combined with pulverized camphor, equal parts of each, and the mixture be used in half drachm doses. This combination is very effectual, but the camphor is apt to destroy the appetite after three or four doses have been swallowed. Some patients do not bear camphor well in any form; such can take lupulin alone, or combined with belladonna, opium, or the extract of lettuce. A person afflicted with chordee should be cautioned against violent sexual efforts, or forcibly bending the penis upwards as he may in an angry moment, lest the urethra be ruptured. Such an accident is always attended with frightful hemorrhage, though the vital forces are usually sufficient to staunch the flow of blood. In case surgical interference be demanded to arrest the bleeding, pressure upon the urethra at the point of injury, will answer the purpose. It has been recommended in such cases to pass a catheter into the bladder, and bandage the penis to the instrument. As the process is sure to arrest the bleeding, it ought not to be overlooked.

Chordee depends upon a want of elasticity in the urethra and the recticular tissue immediately surrounding it, therefore an occasional erection of not too long duration, would tend to overcome the difficulty. The turgid state of the organ that exists during coition is the most beneficial. All impure connections, however, are to be avoided, as well as the injection or introduction into the urethra, of anything irritating. Chordee is always made worse by nitrate of silver and other metallic washes, and by unusually prolonged and illicitly provoked erections.

Occasionally the same pathological state which produces the downward curvature of the penis, will by a deposition of lymph in one side of the organ, give the member a lateral distortion. This imperfection usually alarms the patient more than is needful, for the deviation seldom persists many months, especially under marital influences. In cases of cartilaginous hardness of the urethra, depending upon a chronic chordee, some benefit may be derived from the application to the under side of the penis, and to the perineum, of compound iodine ointment, and extract of belladonna.

Abortive Treatment of Gonorrhœa.—The opinion is prevalent that gonorrhœa, if the case is presented early, can be cured in one or two days. The plan has taken the name of the "abortive treatment," which implies that the disease is cured in its incipient stage; that a mature clap is not reached before the treatment is begun. Every physician experienced in the treatment of venereal complaints, knows well that very few cases are presented early enough to receive the abortive treatment; and if they were, who can tell whether the symptoms are those of real or spurious gonorrhœa, for a slight urethritis that will pass off in a few days without any treatment, is no uncommon affair?

The abortive plan consists in throwing into the urethra a strong solution of the nitrate of silver, or other caustic, and administering a cathartic. The injections are to be repeated every few hours until the discharge has ceased, or violent pain in the testicles warns the patient to refrain from such harsh measures. Among my first patients was a man who earnestly solicited me to cure him in two days, of a gonorrhœa he had contracted a few days previously, and which began to discharge profusely the morning of the day he presented himself to me. The fact that his wife who had been absent several weeks, was to return in two or three days caused the haste. I had never tried the abortive treatment, but considered this a favorable opportunity for the experiment. I kept my patient indoors till the afternoon of the following day, and ordered him to use with a penis syringe, a weak solution of the acetate of lead—a grain of the salt to the ounce of water—every twenty minutes, which he did faithfully. I also prescribed a large dose of the compound powder of jalap. In thirty six hours no trace of the disease except a slight fullness of the organ, remained. This case gave me confidence in the plan, and I repeated it several times afterwards. In two instances the success was about the same as in the first case; in two others the pain in the right spermatic cord and testicle, forbade a repetition of the cold and astringent injections, and suggested the use of hot water dressings to the genitals. In one case the patient experienced a severe chill or rigor after the third injection, and soon had a violent fever. Darting pains were felt in the loins and limbs, with frequent calls to urinate. The high grade of the general fever arrested temporarily the urethral discharge, as it would a purulent secretion in any other part of the body. In three days deep seated pains began in the right knee and extended gradually down the leg to the ankle, and for a while that joint was swollen, abundant effusions taking place into the areolar and investing tissues of the articulation. Hot fomentations soon relieved the ankle, but the knee continued morbidly sensative for several months, the worst symptoms that attend knee-arthritis being apprehended. No treatment was ordered for the urethritis lest the disease, by some influence of a metastatic character, be converted into an articular affection. In the course of a year he entirely recovered, a bougie having been used two or three months to cure a couple of light strictures which were found to exist after the patient seemed to be rapidly improving in every other respect. Having now had satisfactory experience with the *abortive* treatment, I abandoned it to those who wish to have experience in all plans.

A temporary *phymosis*, produced by swelling of the prepuce, will generally subside after a few days, especially if the sulcus between the foreskin and the glans be kept clean by the use of the syringe. Any œdema that may show itself on each side of the frænum will pass off without surgical interference. It alarms the patient, but is seldom troublesome. Sometimes a person having a swollen prepuce will leave it retracted behind the corona glandis, until it is not easy to replace it. This complication takes the name of *paraphymosis*, and may have to be relieved by forcible manipulation carried on while the patient is under the influence of an anæsthetic. It is not necessary to use cutting instruments to relieve the strangulation. A physician of my acquaintance was careless enough to apply a poultice to a patient of his who was suffering from paraphymosis. The consequence was that the spongy tissues became œdematous, and the glans congested, so that death of the parts nearly occurred before relief could be rendered.

Not unfrequently some enlargement of one or more of the inguinal glands will take place during the acute stage of gonorrhœa. Such an accident is apt to frighten the patient, especially if he has ever suffered with syphilitic bubo. He anticipates a similar difficulty, though there is no danger of suppuration. The glands become morbidly sensative through sympathy in some instances; in others virulent material is absorbed from beneath the prepuce. Such swellings soon give way under the influence of an arnica plaster, into which has been worked some camphor and extract of belladonna.

Orchitis is, perhaps, the most distressing complication that ever attends gonorrhœa. What produces this sudden change of the urethral inflammation to that of the epididymis and cord, is a question not yet settled. We know that inflammation of the parotid gland—mumps—often descends to the testicle, yet the relation existing between these organs has not been demonstrated. By some such subtle transposition, urethritis becomes converted into orchitis. As there is a continuous membrane from the urethra through the vasa deferentia to the testicles, it may be proper to say, that the morbid influence reaches the latter organs by "sympathy of continuity." Why, again, the disease lodges in the convolutions of the epididymis, and does not effect the vesiculæ seminales, is not easy to explain. The less complicated intermediate structure would be likely to escape, as there is an abundance of kindred examples:—a bubo follows the absorption of syphilitic virus, the intricate structures of the lymphatic glands being too highly organized to escape the influence of the poison, yet the minute ducts which convey the virus receive no detriment. Beginning in any manner, orchitis is not an easy affection to overcome. The precursory symptoms, if the patient keeps quiet, lives on a slop diet, and places his scrotum in a suspensory bandage, will usually pass off in two or three days; but neglect of these measures, and indulgence in excesses, are sure to establish active epididymitis. This complication, when it appears, generally comes on after the gonorrhœa has existed two or three weeks. The patient entertains the idea that, "the clap has fallen into the testicles," and asks if it ought not to be brought back into the penis? The common treatment for the affection is to apply eight or ten Swedish leeches to the part of the scrotum which covers the swollen testicles, then keep the organ dressed with cold lead water, the patient taking the horizontal position. All of which is very well, except the application of leeches to the scrotum. If those animals be used they should be applied to the perineum, and along the spermatic cord of the affected side. Their bite upon the scrotum covering the inflamed gland, always aggravates the difficulty. The testicle ought to be well supported upon a cushion of lint, and kept wet with dilute hydrocyanic acid, or covered with a moist plaster of the extract of belladonna. The patient is to refrain from stimulating food and drink. A brisk cathartic is not to be neglected if the bowels are confined. Occasionally a case will be met where these measures will not afford much relief, but applications of cloths wrung from hot water, or poultices of lobelia and stramonium leaves, will do much better. These peculiarities of person can be ascertained only by experiment, therefore the physician must take advantage of the patient's desire for a change of treatment. Compression of the gland by means of strips of adhesive plaster, has been recommended in high places, yet such treatment is better adapted to the resolution of syphilitic sarcoma of the testicles. Sheets of compressed sponge bound with tapes upon the swollen organ, and wetted with some anodyne fluid, is much more effectual. The pressure exerted by the expansive power of sponge, as in the manner just indicated, is immense.

The influence of emetics repeated every other day, is not to be neglected in the management of gonorrhœal swelled testicle. Let these be given with the view of arousing the whole system. The simple evacuation of the stomach is not sufficient. Repeated draughts of tepid water should be given until the tissues of the body are thoroughly relaxed; then a mixture of lobelia, ipecacuhana, and prickly ash tinctures, diluted with warm water and given in small doses at first, will eventually produce emesis that takes the morbid rigidity from every muscular fibre. Such an emetic acts particularly upon that system of nerves—the splanchnic– which controls the functions of all the abdominal viscera, as well as favorably influences the heart and arteries. Under the effects of such an operation the testicle will grow less painful, and often become so easy that the patient can immediately go about his business.

Sometimes, as the swelling passes away, a small knot the size of a large pea, will be left in the globus major, and will retain a morbid sensitiveness. This in time passes off, especially if the patient have no stricture of the urethra. It may disturb the patient's mind, by leading him to suppose that this lump will act like a plug in the duct which carries the semen away from the testicle, the loss of the function of the organ being thereby anticipated. All such vagaries may be readily dispelled by explaining the nature of the difficulty, assuring the patient that only one of a large number of ducts (vasa efferentia,) is affected. A suspensory bandage is to be used for months to keep down a slight annoyance in the way of a creeping or darting pain. The support of the suspensory is also useful in preventing the other testicle from swelling, after that which was attacked first has recovered, there being more or less danger of this accident.

In future articles I shall continue the subject, taking up gleet, strictures, and other complications.

DYSMENORRHŒA—WHITE'S HYSTEROTOME.

BY PROF. CLEAVELAND.

One of the most painful forms of disease humanity suffers from, and one which frequently baffles the most skilful efforts of the physician, is dysmenorrhœa; but without attempting to discuss the disease in all its varieties, and the various modes of treatment directed for each, I purpose now only to call attention to one form of the disease, and only one of the many methods adopted, at various times, for the relief of that form.

For years, the profession have been aware that a very painful and not uncommon form of dysmenorrhœa is caused by a contracted or unyielding condition of the os externum, or the canal through the cervex uteri, or a combination of the two. Dr. Mackintosh of Edinburgh, about twenty-five years since, was the first modern physician who *demonstrated* this fact, which has been clearly verified by many since he announced his conclusions to the profession. It is true, Hippocrates distinctly described this form of dysmenorrhœa and its proper treatment, but moderns had forgotten what he had taught. Mr. Cook, in 1657, who gave no evidence of having any practical knowledge of the matter, described, in words evidently copied from a Dutch author, both the disease and the use of bougies for its cure. In 1676 Dr. Roonhuyse gave an account of cases he had treated by using bougies of gentain root, the pith of elder, and even sponge; and yet as I have said, Dr. Mackintosh appears to be the first among moderns to demonstrate satisfactorially to the profession, the necessity and utility of enlarging the canal of the uterus for the relief of this form of dysmenorrhœa.

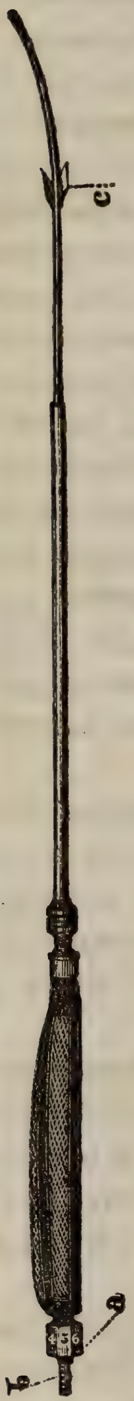
As the difficulty is mechanical, various mechanical measures have from time to time been proposed for its relief. In addition to the relaxing effects of warm hip baths, warm applications to the perineum, and relaxing and anodyne medicines, Dr. Demus and others have earnestly recommended the use of dilating bougies, made either of solid or dilatable material.

Sponge wet with mucillage or gum dissolved in water, compressed and shaped with a knife, was at one time a favorite,—slippery elm bark properly prepared, is at present more frequently used:—but it has been found that these dilatable and dilating materials cannot always be introduced into the cervix until the unyielding surrounding structures have first been divided.

Some fifteen years since, Prof. Simpson, of Edinburgh, described that operation as he performed it; and since then Drs. Rigby, Protheroe, Smith, Oldham, and others in London, have been almost enthusiastic in their applause of the benefit derived from the operation. In 1847 Prof. Simpson said he had incised the cervex *seven* times in one week. The instrument introduced by Prof. Simpson is a kind of lithotome-cache, and he makes one or two incisions, usually not more than a line in depth.

Dr. J. H. Bennet says, that "a mere slit laterally, on each side, not more than a line in depth, which is scarcely felt by the patient, is all that is required to establish a free communication between the two cavities."

Fig. 1.



The operation of incising the lining structures of the canal of the uterus as practiced by Prof. Simpson, has led to various modifications of his instrument, and finally to the one represented in the cut, devised by Dr. O. A. White of Charleston, S. C., and described by him in the *Charleston Medical Journal and Review*, where he described it as follows:—

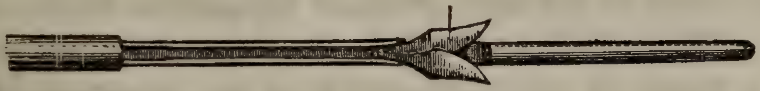
"It consists, as will be seen, of a long and delicate staff or stem affixed to a handle of unusual form. The staff is about the calibre, and has somewhat the same curve as a No. 3 small catheter. It is full nine inches in length, and is so plainly notched and numbered off upon its posterior surface, from the point to the handle, that these measurements may easily be distinguished by the touch alone.

At a moderate distance from the point of the instrument may be noticed two small blades, jutting out from the staff on either side. Each of these blades is capable of being thrust out about a quarter of an inch, or concealed by being withdrawn again within its sheath in the circumference of the staff by means of a certain manipulation at the handle, which I shall take occasion presently to describe.

The standard depth of the womb from the os to the fundus uteri has already been ascertained to be just two inches and a half. To render, therefore, the application of this instrument safe, and in order to bring its utility within the range of possible cases of even smaller uterine dimensions, a point about an inch and a half from the apex of the stem has been selected, from which the knives are made to protrude when needed.

The projection and closure of these blades is effected with great facility, by means of a female screw (*a*), which plays upon a thread (*b*) situated at the very butt of the handle. This screw is hexagonal in shape, each side of which is made to bear a number ranging from one to six. The instrument being closed, No. 1 corresponds exactly to the convex surface of the handle, but progressively, as the succeeding numbers are brought upwards, by turning the screw, the blades are forced out to the extent desired; No. 6, of course, denoting the maximum. The value of this little contrivance will be obvious, it being by this means alone that the operator can learn at a glance to what degree the blades have been opened or shut, after that portion of the stem which contains them has been introduced, to perform its duty within the uterine orifice.

Fig. 2.



The second figure represents an anterior view of that section of the stem which holds the blades, the upper surface being removed in order to display the mechanical principles upon which they act. The stem, therefore, is seen to be hollow, and the two blades lying back to back, are held together and fastened by means of a single pivot to a small steel wire, which is made to pass quite through the centre of the instrument, from *c* to *b*, fig. 1. When closed the blades, of course overlap each other, to economise space, but obedient to the screw (*a*), they are forced to part, one on each side of the stem, in consequence of the steady resistence opposed to the inclined plane of their backs, in the shape of a wedge."

The safety ot incising the cervix of the uterus, and the value of the operation in proper cases is established beyond a doubt, but should never be attempted except after the most cautious diagnosis, and by one who is entirely conversant with the anatomy of the parts, and familiar with the use of surgical instruments.

VENESECTION IN INFLAMMATION OF THE LUNGS.

BY JOSEPH DEITL, M. D.

[Translated from the German, by Lewis E. Miller, M. D.]

Influence of Venesection on the Pulse.—Having considered the influence of venesection on the respiration, it is proper, next, to examine into the influence it exerts upon the circulation. The pulse is greatly affected by bleeding in pneumonia, both as regards its frequency of beat and its other characteristics, and it is of importance to remember *that the greatest turbulence of pulsation may be produced by venesection.*

In cases of pneumonia of the graver kind, even when not interfered with, the pulse sometimes reaches 140 or even 160 beats in a minute, but it usually is far less frequent. Indeed, in some very severe cases with great dyspnœa, the pulse was no more rapid than in health, or only slightly accelerated. In short, the same variation of the pulse was observed as in regard to the perspiration. The stronger and more plethoric the patient at the time of the attack, the more moderate and normal the action of the heart, even in the gravest cases. But as the exudation occured into the pulmonary tissue, the pulse was accelerated, but not, however, in exact proportion to the increased difficulty of breathing. Not unfrequently the disease reached its acme while the pulse beat even less rapidly than in health; and this has always led me to form a favorable prognosis in such cases.

When the exudation is completed in those cases that have not been interfered with, the pulsation almost immediately becomes normal. I have observed in all cases where the pneumonia has been left to its natural action without treatment, that the *fever*, as the pulse indicates, has no gradual decrease or transition, but that it ceases suddenly without any previous abatement, and at the same time that the exudation is completed. The fever disappears almost in a moment, under the eyes of the observer. It is cut off at the moment of its greatest intensity, so that patients whose pulse in the evening was as high as 140 to 160 beats in a minute, by morning it was at the normal standard.

This sudden cessation of fever in cases of pneumonia that have not been interfered with, coincides with the sudden cessation of the difficulty of breathing. In some of the very grave cases, however, neither the activity of the pulse nor the difficulty of respiration entirely ceased until twenty-four hours after the exudation seemed to be completed.

But when the patient has been bled, the phenomena of the circulation are entirely different from those above detailed.

It is a remarkable fact, proved by the general observation of the profession, that the frequency of the pulse in pneumonia, often decreases after a venesection. This is observed in particular with vigorous patients after the *first* bleeding. Even during the flow of blood the diminished frequency of the pulse can be observed. But it is important that the physician understand, that the diminution of the quantity of blood in the system is not the cause of the change in the pulse, but the influence the bleeding has produced upon the nerves, and thence directly upon the heart. This explanation is proved to be correct, for it is observable that the other muscles as well as those of the heart have lost their power and activity by the loss of blood. The sleepiness, as well as the whole array of the so-called nervous symptoms sometimes disappear after one bleeding, proving that the venesection acts on the nerves, rather than mechanically, to influence the circulation. The same is true, as is always observed, in other fevers and inflammations where the circulation has not to contend against any mechanical obstruction. When the patient is vigorous, one bleeding almost always relieves the heart's action. Hence it is a rule, to be observed by those who practice blood-letting in any form of disease:—*Never resort to a second bleeding if the first one caused the pulse to beat quicker instead of slower.*

When the exudation into the substance of the lungs is completed in cases of pneumonia that have not been bled, the pulse speedily returns to its normal frequency. Usually only a few hours is required for this change, which is not sudden, but gradual. But where bleeding has been practiced, the frequency of the pulse is suddenly decreased ; but if the patient has been vigorous, this change is not so manifest as in the more feeble. If the patient has been bled copiously or often, the pulse becomes small, and yet quite frequent, the surface is pale and cold, and the recovery is retarded and rendered quite uncertain. The anæmia produced by frequent or copious blood-letting causes the acceleration of the pulse to be greatly prolonged, and renders the recovery quite tedious as well as uncertain.

The *heart* also becomes stormy, or labored and throbbing after venesection, a condition seldom or never manifested in cases of pneumonia left without interference. This perturbation of the heart is precisely like that observed in chlorotic and other anæmic patients, and should always be looked upon as a *consequence*, and not as an indication of blood-letting.

The influence of venesection on the pulse and the heart, in pneumonia, is of the highest practical importance. Only in feeble patients, when bleeding has not been resorted to, do we find the pulse in the state so often described as the one pecular to this disease. In cases that have been bled, or in feeble constitutions, we can also observe the *double* beat common in typhus, but not quite as distinct as in that disease. Hence, I am satisfied that the "*suppressed pneumonic pulse*" of the ancients, was not the result of the disease, but of the treatment pursued.

When the thick natural blood finds difficulty in passing through the lungs, and the vital power of the patient is not greatly reduced, the coats of the artery will firmly contract, and a cordy or wiry condition of the pulse will be observed; but in such cases, if by copious or repeated bleedings the blood becomes watery and thin and the walls of the arteries relaxed, the pulse will be fuller, and hence will be *developed* as the writers term it, the development being proportioned to the amount of debility produced by the bleedings. It is a well established fact, that seldom if ever the patient recovers after the *development* of a full and double pulse.

The same results follow blood-letting in pneumonia that follow it in typhus, small-pox, scarlatina, and other dangerous acute diseases. In vigorous and plethoric individuals it can be borne as other pernicious treatment can be borne, without always producing a fatal result. But with those less vigorous, its injurious effects are speedily and unmistakably manifest.

Influence of Venesection on the Pulse.—In cases of pneumonia left without treatment the thirst is often very great but by no means so unquenchable and tormenting as in those that have been bled. In those who have not been bled, the thirst disappears when the pulmonic exudation is completed, at the end of the sixth or eighth day. But when bleeding has been resorted to, the thirst continues several days longer.

Sometimes there is so much torpor of the brain that the sensation of thirst is not perceived; but as the brain is roused from its torpor, the tormenting thirst is always perceived. and if the blood-vessels have been drained by bleeding, the thirst is always increased and prolonged by the use of the lancet.

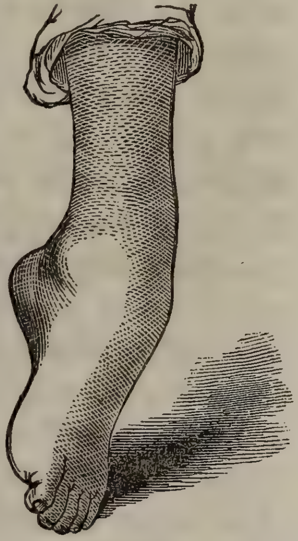
CLUB-FOOT.

BY PROF. A. J. HOWE.

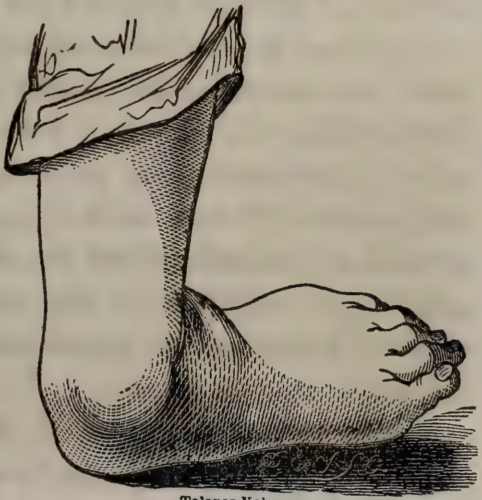
Among the various deformities to which the human frame is liable, there is none more interesting and important than *talapes* or club-foot. The defect, while it is a source of great physical inconvenience, being obvious to every eye is often the subject of idle remark and derision for the unthinking and heartless. The imperfection has attracted the attention of surgeons in every age, from Hippocrates down to the present day; yet the faithful exposition of its pathology and the application of appropriate remedies, have been reserved to grace the labors of recent times.

Talapes has been divided into a variety of species, by orthopedic surgeons, some of whom have seemed as ambitious to exhibit refinements in nomenclature as to promulgate rational ideas in regard to the nature and treatment of the deformity. But as these "scientific" classifications, necessarily encumbered with technicalities, tend rather to obscure than to throw light upon the subject for which they have been invented, I shall have as little to do with them as possible.

Club-foot, as I shall endeavor to show hereafter, depends upon a deficient or unequal distribution of nerve-force. By reference to the anatomy of the leg it will be observed that the great sciatic nerve divides into *two* large branches,—the internal and the external popliteal nerves. Pursuing these to their terminal ramifications it will be seen that the internal (posterior tibial)—the larger of the two— is principally distributed to the gastrocnemius, the soleus, tibialis posticus, flexor longus and brevis digitorum muscles. Now, it is well known that these muscles are preternaturally contracted, or are too powerful for their opponents in what is called talapes *equinus* and *varus*, or that variety of deformity which is characterized by elevation of the heel, with a tendency to tramp upon the outside of the foot, the toes, especially the great toe, being strongly flexed. The fascia and ligaments on the inside of the foot are apparently much too strong, the corresponding tissues upon the outside of the foot being undeveloped, feeble, and relaxed. On the contrary, if the ramifications of the external popliteal or peroneal nerve be traced they will be found to supply those muscles which are to strong for their antagonists, constituting what are called *talapes valgus* and *talus*, the peronei, and the extensor longus and brevis digitorum muscles, and the ligaments and aponeuroses on the outside of the foot, ankle, and leg taking the greater part of this branch. The latter variety of clubfoot, that is, valgus and talus, may be considered as constituting one variety; and varus and equinus as another, bringing all within the range of two varieties. Varus is much more common than valgus. The cause of this predominence undoubtedly depends upon the fact that the muscles which flex the limbs are more powerful than those which extend them. This is well exhibited when entire paralysis affects a limb, it falling into a state of flexion. When-



Talapes Varus.



Talapes Valgus.

ever the muscles of the outside of the foot and leg predominate over those upon the inside, the patient walks upon the inside of the foot and the inner maleolus, the ankle appearing very weak, and the fascia in the hollow of the foot undeveloped and lax. The knee is thrown *in* while walking, and the toes, particularly the great toe, are elevated. The foot appears unusually straight, the arch being lost, and the toes turned out. This variety gives the patient a very unsteady and awkward gate; and seldom draws the foot into a clump, where it may become ankylosed and comparatively useful.

I do not mean to be understood as maintaining the idea that all the muscles which are supplied with the internal popliteal are more or less paralysed in talapes *valgus*; and that the peronei and extensors are in a similar state in *varus*, for some muscles have nerve filaments from both of the great branches of the sciatic. I only make a general statement, which I believe is applicable to the majority of cases. Nature has not permitted one nerve to have entire control over the flexion, and another over the extension of a limb, lest, perhaps, too great deformity take place when one or the other nerve accidentally becomes injured or paralyzed. The tibialis anticus, a muscle which acts upon the inside of the foot, gets its nerve from the large branch which is partially paralyzed in talapes *varus*, yet it seems to be as well developed and active as though it was supplied from the other branch. It is well known too, that the gastrocnemius and soleus muscles are sometimes abnormally contracted in *valgus*, though they be furnished with nerves from the *internal* popliteal branch. These are anomalies which cannot readily be reconciled with the view that there can be but two general varieties of reel-foot, either of which must depend upon inactivity of one of the branches of the great sciatic. However, a close observation of all the phenomena of club-foot tends to sustain the views I have seen fit to advance. If each nerve fibre destined for the leg and foot could be traced from the spinal cord through the sacral plexus, and the sciatic nerve and its branches, more light would undoubtedly be thrown upon the pathology of talapes. Perhaps it would be found that the nerve filaments distributed to the muscles, ligaments, and other tissues which are preternaturally tense or lax, could be followed to a certain point in the cerebro-spinal axis where the disease had its origin. It must be acknowledged by all who can claim any acquaintance with the subject, that the *proximate* or *immediate* cause of club-foot deformities, lies in the great nervous centres. A child goes into a convulsion, and comes out with an eye affected with strabismus,—a muscle could not be made stronger than its antagonist in so short a time; there must have been some sudden defect or interruption in the supply of nerve force. It is possible that a lack of developement *in utero* may produce talapes. A child is sometimes born affected with hare-lip, cleft palate, and club-foot. Such examples favor the arrest-of-developement theory; yet, even in such cases, is there any objection to throwing the fault upon the nervous system? Had that been all right there would be no arrest of developement. All those hypotheses which make a lack of amnionic fluid, pressure of the uterine walls upon the child's legs, the mother sitting too much cross-legged, and other equally absurd notions, the cause of the pedal distortion, are no longer worthy of attention. The habit of using one set of muscles more than another, as those who suffer from caries, indolent ulcers, or cicatrices about the feet are obliged to do, may be reckoned among the accidental causes. An individual so affected gradually accommodates the foot to such new positions as will save the tender parts from pressure, thus he acquires a perfect club-foot.

Parasites in the intestinal canal, injuries to the spinal cord, and severe shocks to the nervous system are among the causes of talapes. I have seen several cases that came from a puncture received in stepping upon nails and fragments of glass. Patients who thus lose the co-ordinating power over a limb, generally possess very irritable nervous systems. A little patient of mine became reel-footed immediately after receiving a severe fright.

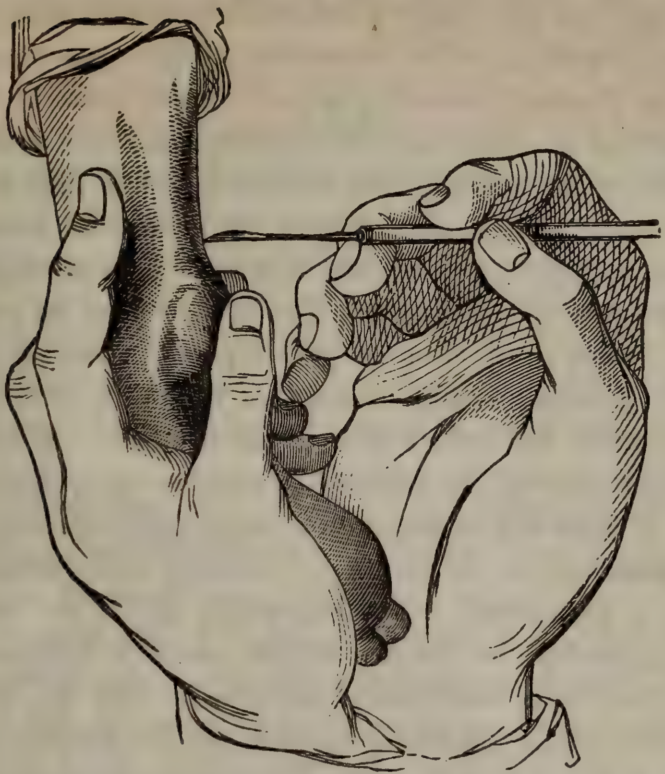
Both feet may be affected with talapes. The relative frequency of the double variety to the single, has not been determined. From the reports of several orthopedic institutions it would appear that there are from two to three cases of single club-foot to one of the double variety. One foot is commonly worse than the other, the right suffering most. Boys are oftenest affected with talapes varus, and girls with valgus; but as the latter variety is much more rare than the former, boys are far the most subject to the disease. When the defect is hereditary, both sexes seem to be equally liable to it.

Talapes may present any degree of deformity, ranging from a slight deviation to a coiling under of the toes so that the patient walks upon the dorsum of the foot, the bones of the tarsus being dislocated by the distorting forces. In the worst cases, the foot while it is enveloped in a boot, appears to those unacquainted with the deformity, to have taken a semi-rotation on the ankle as an axis, leaving it projecting backwards. After a foot begins to deviate, there is no certainty that it will cease twisting until the foot has reached the worst distortion common to the disease. As the patient increases in weight and strength, the foot is more and more crushed out of shape, unless something is done to overcome the vicious tendency.

Treatment.—A few years ago a popular notion existed that a surgical operation was sufficient to cure any case of club-foot; and ambitious surgeons too readily subscribing to the general fallacy, *cut* every case they met, doing little or nothing to overcome the deformity by mechanical means. This course was followed by so many failures and so few cures, that the operation has fallen into disrepute. Ordinary physicians who have not the courage nor the knowledge necessary to perform the operation, have taken advantage of the popular reaction, and boldly declared a club-foot shoe to be all that is necessary in the treatment of the deformity.

It is perhaps needless to say, that either method in itself is inadequate to a cure. A slight deviation in a young subject may be cured by an operation or by mechanical means, either being competent; but in the majority of instances of club-foot deformity, the division of contracted tendons, and the subsequent use of apparatus, are required to ensure a perfect cure. One or more tendons and the contracted fascia may need dividing, but in a large proportion of cases the tendo-Achillis alone needs separating. In almost all cases of *varus* the tendo-Achillis is too short, either elevating the heel, or being so tense as to interfere with the functions of the ankle-joint. In examining a case of club-foot with a view to its successful treatment, the young surgeon should be particular in noticing the length of the great tendon above mentioned. If the toes of the defective foot cannot be elevated as much as they can be in a foot which is perfect, without a twisting of the foot one way or the other, a rocking taking place at the ankle, then that tendon needs dividing. To separate the tendo-Achillis is one of the most simple operations in surgery. The patient, unless he be very sensitive, does not need an anæsthetic, for, so far as the cutting is concerned, there is little pain attending it. The foot is to be grasped in the left hand with the fore finger resting on the integument just opposite the point where the knife is to enter. The manner in which the foot is to be held, and the tenotome just as it is to puncture the skin, are represented in the following diagram.

The knife enters flatwise and passes beneath the tendon, not transfixing the skin upon the opposite side. The position of the point of the tenotome can easily be determined by the fore finger, which rests against the integument. While the tenotome is entering, the tendon is to be made tense by depressing the heel. This precaution makes the tendon stand out so that the knife can be entered without going too



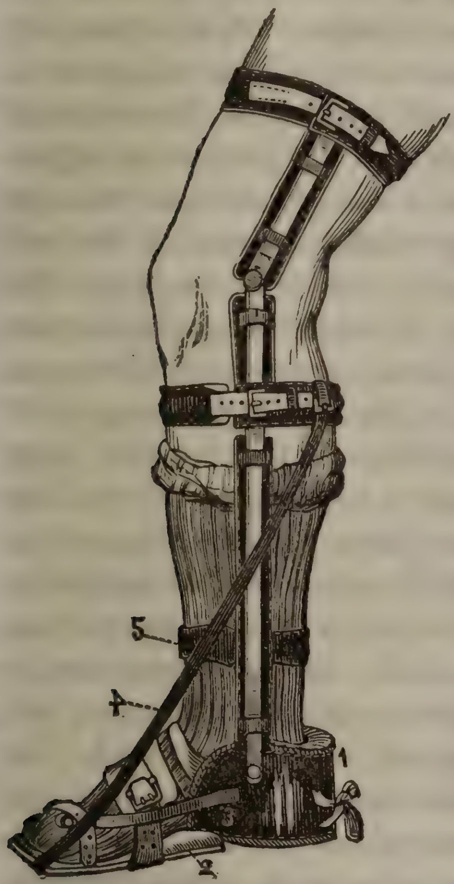
This diagram, represents the manner in which the foot and tenotome are held at the commencement of the operation for cutting the tendo-Achillis.—[Original.]

deep, or transfixing any portion of it. When the tenotome has reached the requisite depth, its edge is to be turned up against the tendon and made to divide that cord by a lever-like motion. Very little force is required to make the knife do its work; the fibres being tense, easily give way, sometimes with an audible snap. Much has been written in regard to the advantages of dividing the tendon obliquely, the argument being that the subsequent union will be more certain and stronger. If it be considered that the cut ends of the divided tendon after the apparatus is applied are an inch apart, it seems to me that there can be little difference whether the tendon be separated by a transverse or oblique section. At any rate, I shall leave the subject to the fancies of speculators, believing the point is too trivial for discussion. The tendon having been divided, the tenotome is to be turned flatwise, and withdrawn through the small puncture made by its entrance. If the knife was not entered deeper than is necessary, only a few drops of blood will run from the wound, especially if the thumb of the operator be pressed upon the part for a few minutes. A bit of isinglass plaster may be placed over the wound after the thumb is removed. At this time it is well to bring down the heel by elevating the toes forcibly. While this is being done, some snapping of the contracted tissues will be heard, and considerable pain is elicited. It may be found now that other tendons need dividing, as well as the tense bands which extend along the inside of the foot nearly reaching to the extremities of the great toe. The tibialis anticus tendon, in some instances, is quite rigid, refusing to let the foot resume its natural position after the tendo-Achillis is divided. This is to be overcome by introducing the tenotome about half an inch below the annular ligament, at a point where the tendon is most salient, and cutting it carefully, to avoid doing any injury to the ligamentous and articular structures of the tarsus. The section may be made by carrying the knife under the tendon and cutting outwards, or, *vice versa.*

The tibialis posticus, though an active agent in adducting the foot, rarely needs section after the heel cord is divided. Where the tendon passes in the groove of the internal maleolus its section would not be difficult; yet it there lies in a synovial sheath, the opening of which is, for obvious reasons, to be avoided. Above this point the posterior tibial artery is proximate to it; below the ankle the tendon is rarely salient and is buried in tissues which obscure the operation. The safest point to divide the tibialis posticus is near its insertion. The tenotome having been slid along close to the bone at the prominence of the scaphoid until it is well under the tendon, the tissues are to be divided clear to the integument, and the section will be successful.

The plantar fascia when too short and tense, as it often is, should be divided freely by introducing the tenotome at the inner edge of the foot, where the band is most prominent, and cutting towards to the integument. The largest arteries lie too deep to be in danger. This is the most painful part of the operation; and should consequently be performed while the patient is under the influence of an anæsthetic. As soon as the knife is withdrawn, which in all subcutaneous operations is to be done without enlarging the puncture, the blood and air are to be expressed with the finger, and the orifice hermetically sealed with a piece of isinglass plaster. The foot is now to be forcibly twisted into a natural position, where it may be pretty effectually secured for three or four days, by the use of strips of adhesive plaster and a bandage. A strip three quarters of an inch wide and a half yard long, is to be heated and applied by sticking one end to the ball of the great toe, and carrying it under the foot, up across the external maleolus, outside of the leg as far as it will reach, making it adhere all the way. Other strips may be applied in a similar manner, until the foot is quite firmly held in the position desired. To make this temporary dressing a little more complete a bandage may be run upon the foot and leg, care being taken in its application to secure as much assistance from it as possible.

At the end of three or four days a club-foot shoe or apparatus should be applied to the limb, the bandage and adhesive strips having been previously removed. To adjust and regulate from time to time the machines to be employed in the treatment, require patience and more skill than has been exhibited in the previous operation. Many expert operators with the knife are lamentably deficient in that mechanical tact which is absolutely necessary in the successful management of talapes. What advantage can accrue from the mere section of a tendon? It will unite again in a few days, distorting the foot as much as ever. A gradual and long continued force alone will induce the foot to resume its normal position. If the pressure be relaxed for a day or two, much additional force will be required to gain what was lost. Parents will sometimes take off the apparatus because it irritates the skin at some point. The surgeon, therefore, should see his patient often, carefully guarding against any unnecessary excoriation or other fault of the machine. The removal of the apparatus every day, rubbing the limb in soap liniment, and using cushions of lint where the irritation is greatest, will be a protection against troubles which might arise through neglect of these matters.



A modification of Scarpa's club-foot apparatus, as applied to the leg, is represented in this diagram. Just below figures 1 is seen the knot of the strap which passes over the instep, to depress the heel and keep it in place: figure 2 points to the sole of the instrument, which is hinged to the heel-piece: figure 3 is seen on the heel-piece, just below the point where the spring is fastened which serves to swing the foot *out* or *in* as the case may require; figure 4 points to the strap which elevates the toes, the joint being in the leg-irons at the ankle; figure 5 is the strap to take the bow out of the leg. (Original.)

The apparatus to be applied after the operation, consists of several pieces so arranged as to depress the heel, elevate the toes as well as force them outward (in varus), and support the ankle and leg. The machine is well represented in the accompanying diagram, except a leg iron upon the opposite side, which corresponds with the one seen. The heel piece is the substantial part or foundation, to which are attached to the two upright leg-irons, having joints at the ankle and knee; and the sole, which is hinged so it may swing out or in, but firm so far as elevation and depression are concerned. Two padded hoops of iron extend around the back part of the leg, from one leg iron to the other, above and below the knee, and straps of leather continue around the front of the limb. These steady the leg in the apparatus. A strap surrounds the leg just above the ankle, and buckles to the inside leg-iron. This is to support the ankle, and overcome the preternatural arch a limb affected with varus takes at this point. A buckskin strap or thong passes over the instep and back through two holes in the heel-peice of the apparatus, and is tied firmly there, to secure this part of the foot in the machine. Nothing is so essential as to bind the foot snugly in the heel-piece by means of the thong. A piece of folded flannel or cushion of lint may be laid upon the instep beneath the strap, to prevent excoriation. A wide buckskin strap, passing through a slit near the inner edge of the sole, extends around the metatarsal part of the foot and buckles on the outside of the sole, to keep the foot in firm connection with this part of the apparatus. Another strap extends from the inner side of the sole near the toe-extremity over the toes to a spring which is fastened to the heel-piece, and stands out an inch or so from the outside of the foot. This spring is stiff, serving to swing the sole outwards taking the forward part of the foot with it. The last piece of the apparatus to be mentioned, is the strap which reaches from the toe of the sole to the hoop below the knee. This is very essential, for it elevates the toe, the heel being correspondingly depressed. The apparatus is to be applied to the limb by first adjusting the heel, lashing it in place with the strap which passes over the instep. The wide strap which passes over the metatarsus may next be buckled; then the leg-irons are to be brought up, and fastened with the straps and buckles to the limb; the ankle strap may be buckled; next the sole brought out to the spring and fastened; and, lastly, the toes elevated by means of the strap before mentioned. The apparatus should be worn night as well as day, it being removed only to have liniment and electro-galvanism applied to the limb. The straps which exert much force may be loosened at night, but in the morning they must be made as tight as the patient can endure. During the first few days that the apparatus is worn, its full force is not to be employed lest the parts pressed upon show a disposition to slough.

The tendo-Achillis, where the section was made, will unite in ten or fifteen days, so that all which is to be done in the way of lengthening the heel-cord must be accomplished within that time. It is well, however, to continue the stretching power for five or six weeks. In fact, the apparatus may be worn several months, when, if the case is not sufficiently improved to admit a common shoe having side irons extending above the knee, the contracted tendons and fascia are again to be divided, and the operative apparatus re-applied.

Something desirable may be gained by rubbing the relaxed part of the limb with a decoction of oak bark in which is mixed enough tinctures of nux vomica and capsicum to stimulate the inactive nerves. A strong current of electro-galvanism is to be sent through the limb, and back, every other day. These agencies restore warmth and activity to the paralyzed parts.

In talapes valgus the tendo-Achillis may need dividing in some instances, the section depending, of course, upon its tension. If the foot can be flexed perfectly, allowing the heel to go down and the toes to be elevated, then this tendon is not at fault. Generally the peronei, (longus and brevis,) are too much contracted, and need dividing. These tendons pass the external moleolus in a sheath which should not be opened. The best point to divide them, therefore, is a few lines below the annular ligament. They can be distinctly felt at this place, being quite prominent when the ankle is rocked. The tenotome should be slid beneath them and be made to cut from within outwards, so as not to endanger the articulation. The extensor and flexor tendons of the toes may be divided at their most salient points, commonly against the phalanges. Talapes valgus is less susceptible of improvement than varus. The general method of treatment, however, is the same in both varieties. Not unfrequently the muscles about the hip are defective, rendering a case still more complicated and difficult to cure. I have several times been obliged to have the outside leg-iron extend to the side of the ilium, and there join a hoop which is made to surround the pelvis, for the rotation was so great at the ileo-femoral articulation that I could not otherwise keep the limb steady.

I should remark, before dismissing this subject, that a limb previous to its being submitted to the action of a machine, should be enveloped in a soft roller, and padded with lint at the most salient points. Over this a snugly fitting stocking is to be drawn. These dressings obviate any unnecessary irritation. A big thick stocking may be drawn over the machine to keep it clean and prevent it from wearing out too fast. Little children, in creeping and dragging their feet about will soon wear off a strap of leather.

Various ingeniously contrived machines have been introduced from time to time to the notice of the profession. I do not wish to be understood as condemning them because they have not been recommended in this article. I have exhibited in the diagram, that kind which I know to be among the best in use. It is every way efficient, and as simple and cheap as it well can be. The apparatus, like all other club-foot machines that are good for anything, is a modification of the Scarpa shoe.

EDITORIAL DEPARTMENT.

THE ECLECTIC COLLEGE OF MEDICINE.

In the autumn of the year 1855, the projectors of the College Journal of Medical Science deemed it expedient that a monthly periodical be established "in order to aid in the advancement of Liberal Medicine;" and accordingly with the first of the following year, (1856,) the first number of the College Journal was published, and its monthly issue has been continued, with what results our readers can judge.

Circumstances which it is not necessary to recapitulate, rendered it desirable to establish a Medical College having the same general aim with the College Journal; and the necessary preliminary steps having been taken, articles of Association were entered into on the 1st. day of November, 1856, and on the 23rd. day of December, 1856, the Corporators received the Charter of The Eclectic College of Medicine.

The Charter of The Eclectic College of Medicine is more liberal, and has been pronounced by eminent legal gentlemen to be far superior to that possessed by any other College in the State. The Trustees immediately appointed a Faculty and made the necessary arrangements to furnish such Medical Students as became members of the Classes in the College, the most complete and full course of instruction this City could afford. That they have succeeded in this design has been proved by the unprecedented success and prosperity of their cherished enterprise.

During the short period of the existence of the College, the labors of those connected with it have been duly appreciated by the profession, and that appreciation has been manifested in various ways, but perhaps the most satisfactory of those is by sending their students to it for instruction and for graduation.

During the first collegiate year, there were One Hundred and Seven matriculants, forty-six of whom graduated, and two gentlemen received the Honorary Degree of Doctor in Medicine. Of this class quite a large proportion had previously attended one or more courses of lectures at other Medical Colleges, and came to ours for their final course and for graduation. Indeed, such also has been the fact each year since.

During the second collegiate year there were One Hundred and Twenty-eight matriculants, thirty-six regular graduates, and the Honorary degree was conferred upon three gentlemen. During the third and last year, the College has had One Hundred and Fifty-nine matriculants, forty-four of whom have graduated, and the Honorary Degree has been conferred upon nineteen physicians, the most of whom were already graduates of medical colleges, but wished to avail themselves of the wide-spread reputation for liberality and scientific attainment which attaches to a Diploma issued from The Eclectic College of Medicine.

The whole number of Matriculants in the College during three years amounts to Three Hundred and Ninety-four,—of whom one hundred and twenty-six have graduated, while the number who have the Honorary degree conferred upon them amounts to thirty-four.

Thus it will be seen that in the short space of three years, The Eclectic College of Medicine has had bestowed upon it an amount of patronage enjoyed by few medical colleges in the land even after many years of toil and effort.

We do not flatter ourselves that this large number of students in attendance on our lectures, and the many letters of commendation received by us from men eminent in the profession, and the notices of approval from the press, are due to us personally, but rather to the position always occupied by our College; and the present article is penned, not for the purpose of self-laudation, but to inform our friends of the success of the efforts made for "the advancement of Liberal Medicine;" as well as to remind the numerous readers of the COLLEGE JOURNAL that no endeavors will be spared to make The Eclectic College of Medicine in the future, eminently deserving the confidence of the profession. The coming session, which will open on the 19th of the present month, (October) promises to be of increased interest and value to the student, and the Faculty will have all things in readiness to fulfil the entire expectation of the class.

BOOK NOTICES.

Thoracic Diseases; their Pathology, Diagnosis, and Treatment. By Marshall Calkins, A. M., M. D., etc. With the Posthumous writings of Calvin Newton, A. M., M. D., etc. And a Biographical sketch of the Life and Character of Professor Calvin Newton. Second Edition, revised and greatly enlarged. Philadelphia: H Cowperthwait & Co., 1858.

THE first edition of this work was issued in Worcester, Mass., five years ago; and met a ready sale. It is too late, therefore, to review the book, either for the purpose of criticism or the exposition of its merits.

According to our own convictions, and impressions received from several who are familiar with the work as originally presented, it was not so satisfactory as the high sources from which it sprung led us to anticipate. Prof. Calvin Newton was a remarkable man, but writing was not his forte. He long took pride in the idea that he was to be an author, but died before his design was half executed. His style, as exhibited in the two hundred and odd pages he wrote, is elaborate and pedantic. He endeavored to impress the reader that he possessed a thorough understanding of pathology; yet his opportunities for observations in that branch of science were exceedingly limited. He was acquainted with the pathological views of other writers, but delving in ideas not his own, in his attempts to expound new doctrines he most signally failed.

Prof. Calkins in his early labors upon the book, essayed to carry out the original design. This he did faithfully,—too much so, we think, for his own good. It is a difficult thing for a man to take up a subject another has been writing upon, and continue the topics without doing injustice to both parties. There is a probability that Prof. Calkins would never have written upon tharacic diseases, had not this accidental and flattering opportunity presented itself; yet, judging from the matter he has contributed to the second edition, we opine that a production all his own, and executed while free from the idea that he was carrying out the plans of another, would be much more valuable to the profession.

As the work is presented in the last edition, it is quite creditable to the [talents and industry of the completing author. Should another edition be called for, we hope to see still greater improvements. The book needs them, and Prof. Calkins is competent to the task. The therapeutics of the work as now before us, are far more varied and scientific than appeared in the first edition. They may now be improved by siftings and additions.

Illustrations representing the thorax and its viscera; the manner, means, and instruments for examining the chest according to the latest and best methods; and apparatus for medical inhalation, would give life and attraction to the book.

A Treatise on Gonorrhœa and Syphilis. By Silas Durkee, M. D., member of the Massachussetts Medical Society, etc., etc. With eight colored plates. Boston: John P. Jewett and Company. Cleveland, Ohio: Henry P. B. Jewett, 1859. Received through Geo. S. Blanchard, Bookseller of this city.

This work of Dr. Durkee is not a little catch-penny affair, gotten up to advertise a practice, like a flood of "*treatises*" with a similar heading; nor does it go so indefinitely into vague and buried theories as to render "confusion worse confounded."

The Chapters on Gonorrhœa are well developed, and contain little that is not eminently practical. The author's treatment for the acute stage of the disease is better than that usually recommended in works on venereal complaints, yet we think copaiba and cubebs are too highly extolled. As this is a matter of opinion based upon our experience with these drugs, we shall not take space to discuss the point.

We are not a little surprised that comparatively nothing is written concerning stricture, that almost invariable sequela of chronic gonorrhœa. If the author had been entirely silent upon the subject, the supposition might have arisen that the subject had been accidentally omitted; a bare allusion, however, is made to the complication, which shows that the omission is not fortuitous. All that is said may be quoted: "For persons in whom an incipient stricture is detected, the bougie should be used every third or fourth day; and during the intervals an injection of tannic acid and sulphate of zinc—one grain of each to the ounce of rain water—should be employed."

For stricture nothing could be worse than injections of tannic acid and sulphate of zinc. Any case will be aggravated by the treatment. The direction to use a bougie every third or fourth day is very well; but some advice should have been given in regard to the introduction of the instrument, as well as the kind to be employed. No surgical manipulation requires more [" *tactus eruditus*," than the introduction of instruments into the male urethra. The use of the bougie is in bad repute among many physicians from the very good reason that they do not know how to employ the instrument properly.

The part of the work devoted to Syphilis, is the most complete and practical production of the kind in any language. The subject is evidently handled by a master. Although the author advocates the use of mercury in the treatment of most forms of syphilitic disease, he does show ambition to extol the agent, simply because its anti-syphilitic power has been questioned. He takes occasion to make the following remarks, 391st page. "While I wish to be included among the advocates for the cautious administration of mercury in primary syphilis, and in many secondary lesions, I should be chargeable with being under the dominion of a blind and illiberal prejudice, and of being behind the improvements of the day, did I not admit the superiority of the iodide of potassium over all other medicines, in the treatment of tertiary phenomena."

Ferruginous preparations are steadily gaining ground as anti-syphilitics; and Dr. Durkee, though not behind the age in other respects, gives them active support.

The style of the author is polished and attractive; the illustrations, as far as they go, are good; and the general appearance of the book is fine. If the work does not find a ready sale, those interested in its appearance will not reap what they deserve.

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Ths Action of Medicines in the System, etc. By FREDERICK WILLIAM HEADLAND, M. D., etc. Third Edition, Revised and Enlarged. Philadelphia: Lindsay and Blakistone, Publishers, 1859. Through Robert Clark & Co.

WITH the appearance of each of the former editions of this work, we recorded our appreciation of it.

When this Prize Essay first appeared, we considered it the most satisfactory and rational exposition of the action of several of the more important Classes of Medicines ever published; and immediately adopted it as a Text Book in its department. Again on the publication of the second edition, we said that "it must be considered unequalled as a Scientific disquisation of the Action of Medicine." This *third* edition comes to us enlarged still, and with the addition of some matters not included in the former ones. It is worthy the highest praise, not as a complete Materia Medica, but a successful essay toward a *rational* exposition of the action of some medicines in the system. Price $2.00.

* * *

Theopneustia. The Bible: Its Origine and Inspiration, deduced from Internal evidence, and the testimonies of Nature, History, and Science. By L. GAUSEEN, D. D. New and Enlarged Edition, with Analysis, and Topical Index. Cincinnati: Geo. S. Blanchard, 1859.

WHEN this book was first published in Geneva, it created quite a sensation among theologians. After several years it was translated into English by Mr. Scott of Glasgow, and is now reprinted in Cincinnati.

We would advise all who have not seen the work and take a special interest in the subjects discussed, to obtain a copy of the American reprint.

* * *

American Weeds and Useful Plants: Being a Second and Illustrated Edition of Agricultural Botany: An Enumeration and Description of useful plants and weeds which merit the notice, or require the attention of American Agriculturist By WILLIAM DARLINGTON, M. D. Revised with additions by George Thurber, Prof. Materia Medica and Botany, N. Y. College of Pharmacy. New York: A. O. Moore & Co., 1859.

IN addition to the matter contained in Dr. Darlington's Agricultural Botany, the work as now offered the public contains a description of the plants usually known as *weeds*, some of the more common medicinal plants, and those native shrubs thought worthy of cultivation. Those who have the work as published twelve years ago, will also observe that the present edition has been enriched with near 300 wood-cuts, a number of the most beautiful of which are from original drawings of Anthony Hockstein, Esq. It is a work of great value, not only to those engaged in agricultural pursuits, but to all students of Botany.

A Physician's Counsels to his Professional Brethren. By a Practising Physician, Philadelphia; Presbyterian Board of Publication.

This little work was produced, evidently, with a desire on the part of the author, to make an impression, not on his professional brethren, but upon the public, to whom it is really addressed. We think it untimely, and in some regards expressive of opinions not founded on facts, yet as it will seldom be read, it can do but little harm. When a question like the following is asked:—"Can the moralist, the philanthropist, and the Christian feel assured that this important profession is friendly to revealed religion, and that they who, by their daily business, declare the necessity for attention to the body, recognize the wants of the soul?" we feel like passing the matter by, with a simple reference to the daily deeds of christian charity, practised without ostentation or hope of recognition even, by our profession every where, and at all times and seasons. It is a subject that does not admit of a doubt or querie.

Lectures on Various Subjects ; Comprising—Thoughts for a Young Man. Poor and Ignorant. Rich and Educated. The powers and Diet of Woman. Demands of the Age on Colleges. Baccalaureat Address. By Horace Mann. New York: Fowler and Wells, 1859.

In this volume are collected some of the most valuable thoughts uttered by Mr. Mann, whose recent death has caused a continent to mourn. For years past Mr. Mann has been freely giving to the public his views in regard to the duties and privileges of humanity, congregated into societies, or as individual members of the race; and some of those here collected have been before the public ten years or more, but as separate publications. As collected they will be more convenient, while the recent death of their author will attach new interest to them. This volume is worthy a careful perusal and earnest consideration.

The American Eclectic Practice of Medicine. By I. G. Jones, M. D., late Professor of the Theory and Practice of Medicine, etc., etc. Extended and Revised at the request of the Author, by Wm. Sherwood, M. D., Professor of Medical Practice and Pathology in The Eclectic College of Medicine, etc., etc. Cincinnati: Moore, Willstach, Keys and Co.

The readers of the College Journal, have already had their attention called to this work, acknowledged by all to be unrivaled for thoroughness, scientific research, and acumen, and for *practical* value, by any similar publication. But we feel that we are conferring a favor upon the profession in again speaking of this publication, and especially as many of our present readers have not seen what has previously been said in regard to it.

Without attempting anything like an analysis or critical examination of the great amount of matter embraced in these two volumes, we repeat, that they contain a more thorough and complete exposition of *American Eclectic Practice*, than has ever been otherwise made public. Price $7.00.

The Hydropathic Encyclopedia ; A system of Hydropathy and Hygiene, in Eight Parts. I. Anatomy. II. Physiology. III. Hygiene. IV. Dietetics. V. Theory and Practice of Water Cure Treatment. VI. Pathology and Hydro-Therapeutics. VII. Surgical Diseases. VIII. Midwifery, and the Nursery. Designed as a guide to Families and Students, and as a Text-Book for Physicians. By R. T. TRALL, M. D. With numerous engraved Illustrations. New York: Fowler & Wells.

SOME four years since this book was published, but then bound in two volumes. The present edition differs from the former one only in having but one cover for the two volumes.

The extended Title-page, which we have quoted nearly completely, will convey a clear and distinct idea of the object and scope of the publication. It is well written, freely illustrated, and a fair exponent of the Water-treatment as taught by its author, and can be consulted with advantage.

A System of Surgery ; Pathological, Diagnostic, and Operative. By SAMUEL D. GROSS, M. D., Professor of Surgery in the Jefferson Medical College ; Member of various Societies, American and foreign ; Author of a treatise on the Urinary Organs, etc. etc. Illustrated with nine hundred and thirty six engravings. In two volumes, 2360 pages. Philadelphia : Blanchard and Lea, 1859. Through Rickey, Mallory & Co.

SINCE the issue of Velpeau's Surgical writings, no work on Surgery has appeared which is any where near so extensive as this of Prof. Gross. No other Publishing House has the facility to warrant the issue of such a book, considering the furor now existing for cheap publications. The position as professor of surgery in Jefferson College the author now holds, will aid much in the sale of this great production.

The work is profusely illustrated; but most of the diagrams—some of them not good—have appeared too often in other books to afford that delight which novelty and originality bring.

It would take too much space for anything like a critical exposition of any considerable portion of the work. In general terms, it may be safely pronounced good. Almost every subject of a surgical nature, is portrayed in language sufficiently explicit for the merest tyro in chirurgical science. Every medical man who makes pretentions to the practice of surgery, should possess this work of Prof. Gross.

The New American Encyclopedia: A Popular Dictionary of General Knowledge. Edited by George Ripley and Charles A. Dana. Vol. VI. Cough—Education. New York: D. Appleton and Co. 1859.

In our notices of the preceeding volumes of this great national work, we have expressed the opinion that no work of its magnitude and value, had heretofore been published in America. Although peculiarly a *popular* Dictionary, matters pertaining to the medical profession are not omitted; but the best writers and scholars in the profession contributed the articles on such subjects as they are most interested in. And a proper prominence is given to the biography of distinguished medical men.

Hints to Craniographers, upon the importance and feasibility of establishing some system by which the collection and promulgation of Craniological Statistics and the Exchange of Duplicate Crania may be promoted. By J. Aitken Meigs, M. D., etc., etc., Philadelphia.

Ethnology, although the youngest of the sciences, is already receiving the earnest attention of the foremost minds of the age; and a collection and study by comparison and otherwise, of craniæ seems the surest, as well as the most interesting method of advancing the *Science of Man*. Dr. Meigs' "Hints" will commend the attention of Craniographers throughout the world.

Hygiene. Being the Substance of a "Charge" given, February, 1859, to the Graduating Class in the Medical Department of the Uuniversity of Buffalo. By F. H. Hamilton, M. D. Proffessor of Surgery.

Like every thing touching professional matters, published by its active and erudite author, this Charge is replete with matters of practical utility, and presented in a very happy manner.

Report on Small Pox, in the City of Providence, from January to June, 1859. By Edwin M. Snow, M. D. Superintendent of Health.—A City Document. Providence, 1859.

The City of Providence, R. I., has a Superintendent of Health, whose duty it is, among other matters, "Whenever any cases of epidemic, infectious, or contagious diseases occur, to examine the locality, and endeavor to ascertain and remove the causes of such diseases, and to take such measures as he may deem advisable to prevent the spread of the same."

Dr. Snow, in addition to the duty here designated, has made an exceedingly interesting and valuable Report on the subjects indicated by the title above quoted. Each City should have a Health officer similar to the one in Providence.

The Physiciann's Visiting List, Diary, and Book of Engagements, for 1860, Philadelphia : Lindsay and Blakistone. Through Robert Clarke & Co.

This welcome annual appears promptly. Our readers have been apprised from year to year of our appreciation of this pocket companion, and we need do no more than announce its reception. It is a *fac simile* of former editions.

EDITORIAL ABSTRACTS.

Jaundice.—Dr. F. T. Frerichs, Professor in Breslin, has recently published his Clinical Treatise on Diseases of the Liver in which he gives as the result of his observations : That there are only two ways in which jaundice can be produced. *First*, by an increased *absorption* of bile from the liver into the blood, as when the bile is obstructed in its passage to the intestines, or when the liver manufactures bile too rapidly. *Secondly*, by too much bile being poured into the intestines and thence absorbed into the blood faster than the biliary matter is disintegrated.

In the discussion of jaundice, its causes and cure,—the author occupies a space of more than one hundred pages of his work. In speaking of bilious fevers and epidemic jaundice, Dr. Frerichs thinks, as also do Annesley and Griesinger, the *bilious* complication is always caused from an *excessive* secretion from the liver.

Varioloid—Variola.—Dr. Rieck considers varioloid to be simply variola, but modified by vaccination. Dr. Cause formerly was of the opinion that they are distinct diseases, but has come to the conclusion that they are not. Dr. Gentrac says varioloid either by vaccination or otherwise, will produce genuine small-pox.

Dr. Wallman, Dr. Jacobe, and Prof. Hebra, relate cases of variola vera in new born infants. In the first case the mother had slight varioloid. In the second case, the child was covered with pustules, while the mother gave no signs of the disease ; and in the third case, the child was born while the mother was sick with variola.

Calculi in Children.—Dr. Foster has operated nine times on children for stone. In two of the cases symptoms of stone were observed immediately after birth. Prof. Balassa has operated seventeen times for stone in children under seven years of age. Dr. Guertz has published nineteen cases of lithiasis in children under fifteen years of age. Mr. Foster removed a stone as large as a horse-bean from a child five years old. Mr. Hillman relates two cases of stone in the bladder of female children less than six years of age. Dr. Spencer has operated sixteen times on boys under eleven years. Prof. Cleaveland, some years since, removed a stone weighing near eighty grains from a boy of seven years old. Mr. Erichsen operated on a girl of four years, by lithotrity, and one of three and a half years by dilatation, and another of two and a half years, by crushing the stone in the bladder.

Spontaneous Salivation.—In a case of a boy suffering from spontaneous salivation, Mr. Moore gave chlorate of potassa, and catechu, and the boy was cured.

Kameela.—This preparation, which is simply the reddish-brown powder that clothes the capsules of the Rottleria tinctoria, has recently acquired quite a reputation as an anthelmintic. Dr. McKinnon thinks it more valuable than any other agent. Dr. Leared has spoken very favorably of it. Mr. Ramskill and Drs. Peacock, Diez, and Schultz, have reported cases where it answered an admirable purpose. The dose is from twenty grains to one third of an ounce, followed by castor oil or some other cathartic.

Bicarbonate of Ammonia.—Mr. Witt of London has published a pamphlet to prove that bi-carbonate of ammonia is a never-failing remedy in scarlet-fever and measles.

Measles.—Dr. Jacobi reports a case of measles occuring in a child *the third time.* Dr. James saw a patient who had the measles, urticaria, scarlatina, and pupura hœmorrhagia, within less than two months time.

MISCELLANY.

A GREAT SCIENTIFIC WORK.

J. B. Lippincott & Co., propose to publish by subscription, a Manual of *Spherical* and *Practical Astronomy*, amply illustrated by steel and wood engravings, in two royal octavo volumes ; at the extremely low price of seven dollars and a half. The work will be prepared for the press by Prof. Wm. Chauvent, who is well known to the scientific world. The manuscript is nearly finished.

PROF. GEORGE H. DADD, M. D.

We are pleased to learn that this well known teacher, author of several popular and scientific works on the Horse, Cattle, etc. and former Editor of the American Veterinary Journal, is to have the Editorial charge of the Veterinary department of the American Stock Journal, a sterling monthly published at New York City.

CHOLERA.

According to late advices from Europe the cholera is making some progress westward. During the last week in July there were 350 fatal cases in Hamburgh. In London about a hundred fatal cases were reported as having occurred in August. Either from a lack of virulence in the disease, or from protective sanitary changes, the malady does not spread that terror it did a few years ago. If we are to have another visitation of the grim monster, the medical profession should be brightening their armor for the contest.

YELLOW-FEVER.

Usually some of our Southern cities suffer from the ravages of yellow fever during the summer solstice. It is now too late for the epidemic. Whether the "cold snaps" of every month thus far in the season, have destroyed the germs of the disease, is a question for medical wiseacres to discuss.

SCARLATINA.

This malady, commonly very fatal to children, has been unusually so during the last year ; and the disease has spread during the hot weather, to quite an alarming extent. There is much yet mysterious about this unwelcome visitant, although its pathology and therapeutics have attracted a large share of medical attention during the last few years.

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ORIGINAL CONTRIBUTIONS.

ANÆSTHESIA—CHLOROFORM IN PARTURITION.:

BY ALMON GAGE, M. D.

Pain is the common enemy of mankind. It is the only thing that can render life wholly worthless and undesireable. By some it is regarded as a curse entailed upon the human race by Adam; a *sequiter* of primeval rascality. Others view it only as a necessary circumstance, or experience of beings conditioned as the race is upon our earth. To conclude that it is in the world as an absolute curse, without subserving any beneficient purpose, would be an impeachment of the Divine wisdom and goodness.

The fact of its afflicting presence is attested by the thrill and twinge that shoots through the whole range of animal life. "For the whole creation groaneth and travaileth in pain together till now." Wherever there is a nerve to convey an impression and consciousness to receive it, there is a liability to experience pain, and co-extensive with it, is there a dread and shrinking from it. Before medicine, as a science, was cradled, it was, doubtless, stoutly combatted by every weapon that could be made available. The contest began when physical suffering did, and it will continue as long as that exists. For no one voluntarily incurs the liability to pain. The lover of science may subject himself to it, to demonstrate some truth, or to test some hypothesis. And the religious dupe and devotee may purposly torture his body to appease or please his goblin-god, and to satisfy his abused conscience. Yet these are only exceptions, for the whole sentient creation shrinks from pain. The economy of pain, its precise use, is not obvious in every instance. Doubtless its office, in that scheme of the Infinite which sweeps through the ages and embraces the destiny of the race, is indispensible and beneficient.

A knowledge of the *means*, and of the *mode* of *applying them*, so as to allay, and also to prevent pain when the causes that produce it are present, is of more importance than all inquiries into its illegitimate introduction into the world possibly could be. The desire of the sufferer, and the effort of the physician have been, to invent or discover some agent which should be potent to exorcise this demon from the sick chamber, and from the surgeon's table. For ages, the conviction has been cherished that nature may be so questioned as to yield up her secret, and tender to man the means of subjugating pain to human will. Every partial success of the past, has seemed to help man to attain this treasure.

If by some magic touch or "lethean draught" the Surgeon or Accoucher could banish this dreaded sentinel, that seems to watch over all the operations of nature, it would be a precious boon to suffering humanity. A multitude of medicaments have been employed from time immemorial, to alleviate pain. Many of these are so well known that their use has become as extensive, almost, as suffering itself.

But it was not till 1846 that the complete antidote of pain was discovered and its capabilities freely tested. To Horatio Wells, doubtless, belongs the honor of giving to humanity the means of deliverance from pain. But the honor was worn by another, and the unfortunate discoverer, became broken in spirit and died by his own hand.

Nitrous Oxide, the agent used by Wells, has been superceded by a number of anæsthetics, of which *Chloroform* is the highest known type. This wonderful agent seems to close up the sensuous avenues that lead to the soul, and to shut the door against every messenger from the outer world. Its value in surgical operations has been fully tested, and after some opposition, it is now fully endorsed by the most eminent surgeons. The proposal to annul pain in surgical operations, has been discountenanced by some few men of standing in the medical profession. M. Magendie argued that it was a trival matter to suffer, and that a "discovery the object of which was, to prevent pain was of slight interest." Professor Miller says of him "no wonder, for his experiments on living animals, his vivisections had disqualified him for a judge." Of this class of opposers he says, "the party is dead, died of anæsthesia, the members were cured by the advance of public opinion; a few are yet under treatment." So successfully employed in all civilized countries, are ether, chloroform, and other kindred anæsthetics, in important surgical cases, that there is no danger of their falling into disuse till they can be substituted by better agents.

Now the question remains to be considered, *whether chloroform shall be given*, *or not*, *during child-birth to lessen pains and facilitate labor when it is difficult.* The time must come when anæsthesia will deprive the lying-in chamber of its terrors. The agent employed may not be chloroform. Some better agent may yet supply its place. But until this is effected, it can hardly be supposed that the benefits of chloroform will be restricted to the uses of the dentist and surgeon. Though the sufferings of those who came under the hand of the surgeons, before chloroform was employed, was great, yet they were as nothing in comparison with the amount of pain endured by women in the throes of parturition. But the opposition to its use in such cases has been fierce and persistent; and mainly on the ground of its being not only dangerous, but injurious to both mother and child. Some few pietists have objected to its use, on the ground that it would be contrary to the Creator's laws, as he intended that woman "should bring forth in sorrow." In this respect chloroform only shares the fate of all discoveries fraught with blessings to mankind. They all have had to run the gauntlet of priestly persecution and clerical bigotry. But the question of its use in the parturient chamber must be decided by facts. And the work has already commenced, and facts indicate that woman is to be the greatest recipient of this inestimable boon.

Professor Simpson of Edinburgh first employed chloroform to annul the pains of labor in 1847. His success was perfect. "The patient said her sensations were like those on awakening from a comfortable sleep,—and she could hardly be persuaded that the child was born."

Dr. Walter Channing of Boston administered it in all classes of cases of labor with complete safety and success. It has been given, according to Dr. Churchill, thousands and tens of thousands of times to women during the last ten years, with success. In puerperal convulsions it has been employed with success also. This is one of the most fatal complications of difficult labor. About one in five die, or according to Churchill, two in nine. Drs. Simpson and Channing assert that chloroform is capable of reducing and keeping in abeyance this fatal malady. If we may credit all the testimony of its advocates, it arrests the convulsions and prevents their return. Still there has not been, as yet, sufficient evidence brought to bear to do away with the dread which still exists in many minds, that there are dangers attending its use is true. But the same may be said of a multitude of powerful medicaments. The question is not, is it liable to do harm ; is it noxious in its tendency ; but, is it not *less injurious* than the pain which would be experienced without it. Pain may be so great as to cause death. Yet it is not known that any serious accident has occurred, when administered by a skilful manipulator.

The fact of its potency to destroy pain, may tempt some to use it carelessly, and under circumstances where it ought not to be employed. The dentist and surgeon, in their perplexing profession, may be tempted to make their labors less tedious to themselves and painful to their patients. But there is no reason why chloroform may not become so well known, as to make its administration as safe as other potent remedies now in use.

Another circumstance which gives promise of its adaptness to safe and profitable use in *labor*, is, that the patient does not require to be brought so entirely under its influence, as for surgical operations. The organs of the female that are involved in childbirth, are extensively supplied with nerves from the sympathetic or ganglionic system. These are not as readily affected as the cerebral and spinal nerves. Hence the sensory nerves will be overcome by the anæsthetic agent more easily, and the organ will lose but little of its contractile power. It has been found by experiment that a woman may be saved the pains of labor without being rendered unconscious. The dose of chloroform may be so regulated as to affect the sentient nerves only, and thus pain be relieved while the intellect remains undisturbed.

It has been demonstrated by experiment, that under the action of chloroform, the nerves lose their powers in regular succession. First the cerebral lobes lose theirs ; then consciousness, with the intellectual and emotional faculties, is arrested. Next the cerebellum and spinal cord. The medulla oblongata still retains its function. The ganglionic nerves still perform their function. These cease last of all, and the womb retains for a time its contractile power during states of anæsthesia so deep as not only to annihilate consciousness and sensibility, but also respiration. So tenacious is its power, that spontaneous delivery has taken place after all evidences of stomatic life have disappeared. Thus it is clearly proven that the danger need not be greater in this class of cases, than in surgical ones.

When we reflect that our civilization, as is confessed on all hands, tends to the physical deformity and depravity of woman, thus rendering her function of maternity more painful, and consequently more to be dreaded, the importance of anæsthesia in childbirth, appears, as it truly is, one of immense importance. And shall this great boon be unappropriated to woman's well-being, because a few medical leaders set their face against it? The time has come when no surgeon repudiates chloroform. Or if so, he is one who has no position to gain or to maintain. So the time must inevitably come, and soon, when the obstetrician will not be deemed competent to his profession, until he shall know how to employ safely and successfully some anæsthetic.

There is nothing in the chemical composition of chloroform that is especially indicative of a terrible foe. Its constituents are $C_2\ H\ Cl_3$. These elements are not strangers in the human body. And further, it does not very much offend either the taste or smell, those sentinels that question every applicant for admission into the body where so many strangers meet. Then again the exhibition of chloroform is not determined by quantity, but by the effects produced. These are so varied and evident, that no one acquainted with them need be mistaken. Its effects are made evident to the touch, sight, and hearing. When administered by inhalation, anæsthesia may be induced as slowly as desirable. It needs only attention to discover the proper stage at which anæsthesia should cease. When an individual has once been brought under its influence, without revealing any constitutional incompatibility, subsequent administrations may be deemed perfectly safe. When there is a susceptibility that would render its exhibition dangerous, it may be discovered at once, and before any injury is done.

The action of chloroform has been divided into *three* stages. The *first*, indicated by a slight change in the feelings of the patient. *Second*, inebriation is effected. *Third*, complete anæsthesia, or unconsciousness, when the pulse grows feeble, and death may ensue. These divisions are arbitrary, for there is a gradual increase of the anæsthetic effects from the slightest to the deepest sleep, or unconsciousness.

Another modifying circumstance and one that may be made available for safety, is the dilute form in which it is administered. There is hardly an agent that may be so modified in intensity, and varied in administration as chloroform. It is very greatly diluted with air when taken into the lungs, and yet its effects may be apparent when the blood has absorbed only one fifty-sixth part of what it is capable of receiving. By carefully observing all the indications, the administrator may avoid falling into errors so far as the patient is concerned.

Chloroform may not be the best anæsthetic that nature's laboratory contains, for it is to be hoped that successful research in this direction is not yet completed. But until a better agent is found, it would be wise and humane to employ this one for the relief of suffering humanity under all favorable circumstances. To do otherwise would be a refusal of favors of Providence, a sin of omission.

THE AIR WE BREATHE.

BY WM. GUILFORD.

To live it is necessary that we should eat and that we should breathe. Improper food is the cause of a great number of diseases, and a deficiency or excess in the chemical elements of the air is likewise as prolific in morbific influences. An enquiry therefore into the chemical changes of the atmosphere, becomes essential to a clear understanding of the causes of many of the diseases that afflict humanity.

The atmosphere is chemically composed of two gases,—nitrogen, and oxygen,—in the proportion of 80 of the former to 20 of the latter; and these proportions have been found to obtain wheresoever examined. It is not therefore a simple admixture but a chemical compound; for if it was an admixture the proportions would vary as the quantity of the one or other gas was in preponderence. The great uniformity in these proportions has led to the conclusion that as oxygen is undergoing a large and constant consumption there must be some natural agency for eliminating an amount of oxygen to the air equal to the amount consumed. What that agency is has baffled scientific research. Vegetation it is true, yields a ballance of free oxygen to the air, but the balance is small, and these sources are circumscribed within certain localities, while the uniformity is general and exists as well over the burning sands of the desert and the ocean's countless waves as over the luxurious foliage of the torrid zone.

Now I would suggest that we have a vast and never-ceasing source, which is constantly generating free oxygen, and that is the *celestial laboratory* with its gigantic galvanic batteries.

Evaporation gives water to the atmosphere, which descends again to the earth as rain. In this rain we find a new principle, which did not exist in the vaporized water, i. e. ammonia (NH_3). The mortal chemist can by means of the electric spark compel nitrogen and hydrogen to unite and form ammonia. What hinders then the Immortal Chemist, wielding the lurid lightning, from compelling the hydrogen of the vaporized water to unite with the nitrogen of the air and form this ammonia, and will this not promote the equilibrium between the nitrogen and oxygen in the atmosphere? for not only would the oxygen become largely increased by the decomposition of the vaporized water, but the nitrogen would be diminished. This is an agency that is not circumscribed within certain metes and bounderies, but it is as universal as the atmosphere.

This chemical composition, the atmosphere, has been ascertained to be the only element capable of supporting life. No other gas or combination of gases can be substituted for it, nor can any other *proportion* of them be breathed for any length of time with impunity. It is likewise worthy of observation that in the animal economy, health appears to be that state of the system where the acid and alkaline fluids are in equilibrium, that we find in the atmosphere, the bases of both acid and alkali, and that the air is injurious when these bases are not in equilibrium.

The importance of oxygen gas, and its effects on the system are well known. It is the life-giving and life-sustaining elements. Annihilate it and the world would become a desert. Increase it, and the fire of life burns brightly, the pulse bounds, the heart beats more forcibly, the blood comes through the arteries with increased rapidity, the spirits become more exhilirated, motion acquires an extastic springiness. In one word, vitality becomes intensified. Lessen it, and an entirely contrary state of the system supervenes, and vitality languishes. As in our stoves so in the human body; if the draught is open, the fire burns brightly, if it becomes choked up the fire languishes.

But what is this life-giving, fire feeding principle which oxygen imparts? When it unites with carbon of the wood we call it flame; when it unites with the zinc of a battery it is called galvanism; when that galvanism is passed through a horse-shoe magnet it is styled magnetism; when it is concentrated it is called electricity; when it unites with the carbon of the blood we style it vitality. But in each, oxygen unites with some substance, and a peculiar stimulating principle is formed. This principle I call electricity, the power which governs the world emanating from the Divine Hand, while oxygen is the vehicle which conveys it. If I am correct, oxygen is not then vital *per se*, but only so far as is united or is associated with electricity.

When a current of electricity is passed through oxygen, an oderous principle is developed called *Ozone*, or electrified oxygen. This principle has been found by analysis to be deficient in the atmosphere during the prevalence of cholera, and its deficiency has been supposed by some to be the cause of this epidemic. Ozone is much more vitalizing in its effects than oxygen, while carbonic acid contains no vitalizing principle. The former is *electrified oxygen* while the latter is oxygen united with carbon *having parted with its electricity.* Ozone, or electrified oxygen, is deficient in the atmosphere during cholera epidemics, and the consequence is that prostration of the vital powers, rapid and fatal in its effects, which we call by that name.

Let us turn now to the other constituent element of the air—nitrogen. The duties of this gas and its office in the economy is just beginning to be understood. Until recently it has been considered as a mere diluent for the oxygen—as not being absorbed during respiration, and consequently taking no part in the animal economy. I, however, have for several years been under the impression that nitrogen is absorbed and performs an eminent part in the phenomena of life; for I did not believe that an all-wise Creator would surround the earth with a fluid, four-fifths of which was only subservient as a dilutent for the other one-fifth. My impressions were, that the office of the nitrogen is to furnish the bases for the alkaline fluids of the system, by means of which the chyle becomes animalized and elaborated, its fatty globes being gradually converted through its agency, first into albumen, and then into the plastic material of which the organism is formed.

Let us glance for a moment from cause to effect. The crowded and ill-ventilated prison, or hold of a ship, induces disease,—the air becomes dificient in oxygen and largely surcharged with nitrogen. The liver becomes engorged with nitrogenized fluids and in consequence the chyle is more highly ozotized, and fibrine is generated in excess. What is the usual treatment for this diseased state of the system? To lessen the nitrogenized humors by means of purgatives, diuretics and diaphoretics; to diminish the products of these humors—or the *fibrine* in the blood, by venesection and an antiphlogistic regimen. This with attention to local symptoms is, I believe, the generally received practice of therapeutists.

But the nitrogen has another and still more important office to perform in the animal economy, if I do not greatly err. It becomes a basic principle in the formation of the red corpuscles. That it is a constituent element of iron, sulphur, and phosphorus, is my firm conviction, and consequently that these so-called elements are compounds. To assert that the science of chemistry has reached its ultimatum is preposterous. Therefore the wood *element* is often synonomous with ignorance. It is the bounds of our present knowledge; but to claim that any so-called element is incapable of farther subdivision would be estimating Divine power by the extent of present human knowledge—would be limiting the power of God to create, by man's power to imitate or destroy. If iron, sulphur, and phosphorous, are elementary substances, how do they enter the organism? Not through the chyle—for that fluid contains only a trace of them. They are not formed until after the chyle has been *nitrogenized* by means of the bile and pancreatic secretion, and elaborated in the ductless glands. Again, if they come from the food, how does it happen that the blood of animals eating the same food vary so much in the amount of blood corpuscles. The gramniverous bird has sixteen parts of blood corpuscles to the one hundred parts of blood, while the gramniverous horse has but ten. Omniverous man has twelve parts, while the omniverous hog has but ten. Food therefore does not seem to have much to do with this diversity; but how is it with the air? there we find a definite law of proportion. As is the respiration of the animal, so are the iron, sulphur, and phosphorous,—elements of the blood; and this proportion never varies.

Respiration therefore takes its part in the formation of the blood globules. But which of the constituent elements of the air is it that furnishes the basic principle? It is nitrogen. We find that administration of chologogues are followed by an increase in the quantity of blood-globules. We find that torpidity of the liver is attended with their diminution. We find our northern climate, deficient in nitrogen, occasioning a deficient hematosin; while the south, containing an excess of nitrogen, is subject to diseases of increased vitality. In the north we have diseases of the asthenic type in the south, of the sthenic. In the north they are chronic, in the south acute. In the north, not only is the blood deficient in hematosin, but the excrements are likewise deficient in phosphates. In the south they contain them in excess. Now if these phosphates come from the metamorphosis of the tissues, they would exist in both cases, for patients in both regions equally suffer marasmus. If they came from the food, they would exist in both, for both are equally on low regimen. The chief difference in the two regions is respiratory. The one has difficult respiration, and the air contains less nitrogen than normal. The other has increased respiration, and the nitrogen of the air exceeds its normal standard.

I have above jotted down some thoughts upon a subject which to my mind is of the greatest pathological interest. Hoping that deeper and more powerful minds may be turned to the investigation of "The air we breathe" and its physiological effects in health and disease, I leave the matter for the consideration of the readers of the College Journal.

NOTES.

BY Z. M. LANSDOWN, M. D.

Castor Oil in Milk Sickness.—A portion of the country over which I ride being troubled with this most distressing disease, I have been called to treat numerous cases wihin the last four years—and have used in my treatment almost every thing recommended in the books for the relief of persons laboring under sick stomach; but none has proved so effectual as the Croton oil. Usually one purgative dose, (say from two to five drops,) administered in a bread pill, is amply sufficient to effect a safe and speedy cure. The medicine will usually operate in from thirty to forty minutes, when all the distressing symptoms attendent on nausea and vomiting will subside. In no case I have been called to treat. have I had to administer the second dose. All the patient needs to complete the cure, is a few doses of hydrastine and quinia, given with reference to their tonic effects, on the blood, and mucous tissues. The same treatment also I have found very beneficial in dyspepsia and chronic liver complaints, causing the gastric juice to be secreted and digestion to go on normally.

Kalmia Latifolia.—I have been using this agent with good effect in the following diseases, viz: Tinea capitis, White-swelling, Mammary abscess of the encysted variety, Gleet, Syphilis, Hæmoptysis, etc. I treated one case of bleeding from the lungs with the kalmia which had baffled the treatment of several physicians, who had tried their skill in endeavoring to arrest it for three months.

I prepare it for use in the following manner. Take any quantity of the fresh dried leaves of kalmia latifolia and place them in a kettle over the fire. Cover the whole with soft water, and boil slowly for four hours, pour off the liquor, add fresh water and continue to boil for four hours longer, press out the water from the leaves, add the first and second liquors together, and simmer down to one-half, and add to each gallon two ounces of pure carbonate of potassa and bottle for use. To saturate a cloth with the above preparation and bind on to a fresh cut, will induce it to heal by first intention. On the first application the patient experiences great pain for the space of one or two minutes, but I have not found anything to equal the kalmia in the above diseases.

MAXILLARY ABSCESS.

BY THOMAS M. BENTLY, M. D.

J. T——, aged 35, occupation carpenter, of good muscular developement, large chest, sanguine bilious temperament, height five feet eight inches, strong athletic man, applied to me January 30th, 1859, with his head and face very much swollen, left nostril nearly closed with a red angry looking tumor which was discharging a fœtid matter, gums, fauces, and throat exhibiting a syphilitic or venereal taint; an aperture where the third superior left molar had been removed two years previously. This opening was as large as a crow's quill, and was completely lined with a closely adherent, dusky, light colored, fœtid matter, and was constantly discharging matter of the same character to the great annoyance of the patient and all who were near him. Matter of this same character was also discharged through the posterior nares and caused some irritation of the throat and a troublesome hacking cough. Distressing neuralgia of the face and head also existed.

Two years ago, or in the fall of 1855 he applied to a dentist, and had the upper third molar of the left side extracted, and with it a large portion of the floor of the antrum was also removed, being firmly attached to the roots of the tooth. He presented the tooth, and the part of the floor of antrum removed was larger than a half dime. From this time until the present he has been subject to dull pain under the left eye, neuralgia, and occasional discharges of matter and hacking cough, especially on taking a little cold. He had bronchitis six years previously, had active symptoms of gonorrhœa, and also an attack of Asiatic cholera in St. Louis. His constitution has been somewhat impaired ever since; and for the past two months has been under treatment, the first month of the time for typhus fever, the latter part of the time the treatment had been directed to the local difficulty in the face.

He was continually growing worse. The treatment was essentially allopathic. Notwithstanding the complications of bad doctoring, syphilitic taint, etc., the prognosis was favorable. I commenced by enlarging the opening through a fungus growth of flesh, and through the passage above alluded to, into the antrum, and with a bent blunt probe introduced a strip of old cotton shirting, three-fourths of an inch wide, and three and a half feet in length, completely filling the cavity. I withdrew this and with it the matter which the syringe would not bring away. I then introduced a clean strip and left it intact. This was repeated three times a day for one week. The swelling was reduced in twenty-four hours, and disappeared in three days. I administered the vapor alcoholic bath every other night, gave alterative syrup with the addition of stillingia three times daily, kept the bowels soluble, and enjoined light meals of good nutritious food, and exercise in the open air, the alternate use of the alkaline and acid baths at least three times a week, and always accompanied with friction with the hand or towel.

May 7th. No unusual discharge from the antrum, cough left, aperture closed to the size of a pin's head, strength returning, and he has been actively engaged in business as boss carpenter since April 1st. I will add, that during the first two months I used occasionally injections of myrrh and catechu tinctures, and white oak bark decoctions; some times common salt. All of which I believe answered indications of cure.

GLEET.

BY A. B. JACKSON, M. D.

Gonorrhœa, uninfluenced by medication, or badly treated, generally results in a chronic gleety discharge from the urethra, and incipient strictures. So far as my observation extends, about one half of all cases of gonorrhœa terminate as above stated. Whether the nature of the disease, or the fault of the treatment necessitate this, is a question open to those who wish to investigate it. I am free to acknowledge my present inability to manage all cases so that they shall cease without being prolonged into a glairy, mucous, or muco-purulent discharge from the urethra:—in other words, to cure the disease before it reaches the chronic form.

It is puzzling to determine with any considerable degree of certainty, in cases where the chronic stage is reached, when the acute stage ends. In general terms, it may be said, that after several weeks have elapsed from the earliest symptoms of the disease, the discharge having diminished and become less purulent, and non-infectious, and the scalding of urine subsided, the chronic form is reached. However, in regard to the infectious character of a gleety discharge not much which is *positive* may be affirmed. In ordinary cases the discharge attending gonorrhœa loses its infectious qualities after two or three months, and in some instances, sooner than that. As very serious domestic, and other difficulties, may arise from an erronious medical opinion, the physician should be mindful of the responsibility sometimes involved in his decision. I could give several examples from cases coming under my own observation, which strikingly illustrate this precept, but I prefer to quote from distinguished authority. Sir Astley Cooper observes,—"Gonorrhœa, when neglected, sinks into a gleet, and is known by the change of color of the discharge, and the pain attending the inflammatory stage ceasing. In this state, is the discharge infectious or not? I doubt myself whether a gonorrhœa ever loses its power of causing infection as long as any discharge from the urethra remains, and I will give my reasons for this opinion. A married gentleman went to Lisbon from this country, and whilst at a distance from home, departed, as too many do, from the path of virtue. The Portuguese lady with whom he cohabited gave him the clap. He returned to England, and after the expiration of five months and three days, after first observing the gonorrhœa, he called on me, and asked whether he might return home with safety to his wife. He said he had a little discharge, and wished to know, if after having it five months and three days, it were possible for it to be infectious. I replied—'Certainly not; you may go home, there is no danger of your giving it to your wife.' He went home, and, unfortunately, gave his wife a severe clap. I attended both the parties afterwards, and was extremely sorry for what I had done;—but I thought, at the time I gave the advice, that a gleet was not infectious. But I think differently now,—and believe that, after several months, the discharge *is* infectious."

"A gentleman from the north of England, who had been recently married, came to me, and said that he had communicated a gonorrhœa to his wife. Shocked at such an occurrence, I said, 'How could you think of acting in such a manner?' Why, Sir, said he, for fourteen months prior to my marriage, I made various attempts to get rid of it, and had a variety of advice about it, but a yellow discharge always continued. I was told by every body that it was not infectious, and not until after such repeated assurances did I get married; the consequence, however, is, that my wife has a severe pain in making water, and a copious discharge? I visited her, and found her in this state; she was some time under treatment before she recovered. From what I have seen, I hold that a medical man is not warranted in saying that a discharge of a gleety kind is not infectious."

It will be seen that Mr. Cooper "doubts whether a gonorrhœa *ever* loses its power of causing infection as long as any discharge from the urethra remains." I think such a discharge *may be infectious*, even after it has continued six or eight months, yet from quite a number of cases which have come to my knowledge, I entertain the opinion that the discharge is not generally infectious after it has continued eight or ten weeks. I believe it sometimes loses that quality in four or five weeks. As there is no definite time for infection to cease, the longer period parties having chronic gonorrhœa, put off having sexual intercourse, the safer it will be for them. The frequency of gonorrhœa in this country depends upon the fact that lewd females paying no attention to gleet, receive company as soon as the acute symptoms of the disease have abated. So common is leucorrhœa, especially among prostitutes, that it is almost impossible to determine when the vaginal secretion has ceased to be infectious. Then, too, some men are more susceptible than others, as was remarked in a previous article, to the contagion of gonorrhœa. A woman of the town, having an infectious vaginal discharge, might clap only one out of ten of her patrons.

A gleet may entirely subside for a month or two, then become quite profuse from some unusual effort. The discharge when it is present, varies from time to time in appearance. For weeks it may be thin, nearly colorless, and abundant; then it will gradually change in consistence and quantity, scarcely being observed except a drop or two which, in the morning, may be squeezed from the fossa navicularis. The bulbous and membranous portions of the urethra, occasionally are the seat of the secretory irritation, as can be ascertained by placing the finger upon the urethra deep in the perineum, and sliding it forward, using a little pressure all the while, muco-purulent matter being made to appear at the meatus by the act.

A gleet depending upon strictures. may present the same symptoms: and no certain method exists for determining what the real cause is, but the passage of a bougie. A gleet depending simply upon secretory irritation, or debility of the mucous membrane of the urethra, exists when there are no morbidly sensitive or narrow points along the urethral canal, as manifested by the introduction of a bougie. If a tender point be discovered about a half inch behind the meatus, and another four or five inches back of this, then incipient strictures are present.

It is customary for physicians to use a common silver catheter to diagnose stricture in its early stages. If the instrument passes into the bladder without much trouble, the decision is that no stricture exists. Sometimes a metallic bougie is used for the same purpose. Now, I protest against the use of such instruments to detect stricture. They are so stiff and heavy that they give pain all the way, passing tender points without eliciting those delicate, keen sensations which are marked when a proper bougie is introduced. But, of the manner of using bougies in curing strictures I shall have something in particular to say in a future article. If upon the examination of a case it is decided that nothing but an uncomplicated gleet troubles the patient, some of the following means may be employed to overcome it. As the disease depends upon debility, local and general,—tonics are indicated. Internally, iron, salacine, sulphate of bebeerina, and wild cherry, may be given in any palatable form or vehicle. Decoctions of buchu, and uva ursa, are often valuable adjuvants to the more tonic course. Stimulants should be employed with caution, yet they are occasionally effectual. I cured one case with tincture of cantharides, which had not yielded to other treatment. Distilled and fermented drinks do mischief in every instance in which they are taken.

Local means when properly directed, are the most effectual in the cure of gleet. Injections of astringent metallic salts in solution, are commonly employed, yet they often aggravate the disease, and establish a stricture. I prefer the vegetable tonic, astringent, and stimulating washes, when anything of the kind is to be used. A cold infusion of golden seal, or wild cherry bark, makes a desirable wash to be used with a penis syringe in the treatment of gleet. It is to be thrown into the urethra every three or four hours, and retained five minutes. Some surgeons are careful to instruct their patients to press upon the urethra, when using the syringe, lest the injection go back into the bladder.—All such instruction is twaddle;—the muscular fibres which compress the urethra are too firm to yield to the force of an ordinary penis syringe, especially if the injection be of an irritating character.

The injection of Port wine reduced two or three times with water, some quinia being added, will, often cure obstinate cases of gleet. A favorite prescription of mine in the treatment of pure gleet, is the following:

℞. Port Wine, f℥ij.
Tincture Nux Vomica, fʒij.
Water, f℥vi. M.

Let a drachm or so of this mixture be thrown into the urethra three times a day, and be retained three or four minutes each time.

It is common for me to prescribe a bougie lubricated with glycerine or castor oil, to which has been added strychnia, in proportions as follows:

℞. Glycerine. f℥j.
Strychnia, grs. ij. M.

A common elastic bougie, smeared with the above pomade, and passed into the urethra twice or three times a day will often cure a gleet, without any other treatment. The bougie should ordinarily be a number eight in size, or about as large as a common catheter. If it be too large or too small, its influence is not good.

A person having gleet should be particularly regular in his habits, avoiding excesses of all kinds. Every physician experienced in these matters, can call to mind cases in his practice which, while they were convalescing finely, became suddenly as bad as ever by a rail-road or horse-back excursion, by late suppers, drinking, or sexual excitement.

Constipation of the bowels is another common cause of a prolonged gleety discharge. Attention to hygienical rules has much to do with a rapid and permanent cure.

The mind of the patient who suffers from gleet, as well as stricture, is usually depressed, rendering him perfectly miserable. A thousand bug-bears are imagined; sometimes the idea that the gleet is a seminal waste, causes the mental anxiety; at others, that a constitutional taint is to torment him and his progeny forever and ever. Unless these absurdities can be banished, remedial agencies will have very little effect. It is about as difficult to cure a man against his will, as it is to convince him against his will. Suicides are not unfequently committed on account of the subjects harboring the impression that complete restoration to health could not be effected.

Sharpers taking advantage of the mental weakness depending upon gleet, often decoy victims into their toils, by advertising that they can restore those who are depicted as being on the brink of ruin, to the most vigorous health. The figurative expression that "a drowning man will catch at a straw" is literally fulfilled in such instances. Occasionally one of these *newspaper doctors* knows enough to cure an individual, as well as to filch his money; but usually they no more understand the conformation of the genitals, than they do the circulation in a flea. These medical mountebanks, by some fortuitous circumstance, unfortunately for the world, were once engaged in vending some nostrum at which they learned the gullibility of the people; then, getting out of employment, and being too lazy to earn an honest living at some respectable business, they set up in a large town or city, and hired the papers to herald their deceitful pretensions.

I would not be understood as objecting to the plan of subdividing professional, as well as other labor. In the law one advocate is acknowledged eminent in criminal jurisprudence; another is versed in litigating marine affairs; still another in ordinary civil suits; and so on, each by devotion to a special branch, contributing more than he otherwise could, to the perfection of the whole system. Such are my views in regard to the profession of medicine. Let a medical student, after he has taken a thorough course of sudy in the various branches of medical science, and, perhaps, practiced as physicians ordinarily do, devote a few years where there exists the best opportunities to learn, to enhance his skill in some particular department of medicine or surgery. The eye may claim his attention, or the ear, the throat and lungs, the genitals the skin, obstetrics, genearl surgery, etc. Such a plan could be succesfully carried out in the cities and large towns. But to do it, the necessity arises for the aspirant to public patronage, to take some method of making known his speciality. The newspaper is the best medium for bringing one's name and business before the people; yet for a doctor to announce his place of business, and kind of practice in the papers, *is advertising*, than which there is no offense more heinous in the estimation of the regular profession. It constitutes an unpardonable heresy. A few oculists belonging to the first families; are tolerated, the "indulgence" being granted partly because it could not well be avoided, the speciality having been established before the danger of the custom was appreciated; and partly because the great body of the profession is unskilled in the surgery of the eye, an organ which does not allow of blunders going unperceived. The most palpable blunders are committed every day by members of the highest standing in the profession, in the treatment of difficulties connected with the genital organs—parts of the body more complicated and delicately organized than the eye,—yet the nature of the trouble leads the patient to conceal the malpractice. Not long since I was called upon to take charge of a patient who had been under the care of one of the most eminent veteran surgeons in the country. I was summoned to arrest a severe hemorrhage from the penis, the first attack of which came on immediately after an attempt had been made to pass a catheter through a strictured urethra. Several bleedings came on subsequently, all of which had been arrested by pressure in the perineum, except the last. This would not yield to the usual treatment, and in exploring the urethra to ascertain the source of the hemorrhage, I found a false passage, leading an inch and a quarter into the left side of the prostrate gland. This false passage had undoubtedly been made through the rashness of the surgeon in his attempts to carry a catheter into the bladder. Such a blunder, committed upon any other part of the body, would be exposed and condemned, but the patient was afflicted in the privates, therefore everything connected with the treatment, whether it be good or bad, was studiously kept a secret. The very surgeon who punctured the prostate, would be particularly severe in his denunciations of any one who should make a speciality of venereal disease, though the speculist be as proficient in the anatomy and pathology of the genitals as the most eminent oculist is in the conformation and derangements of the eye.

I have not made these remarks as an apology for "venereal doctors," ninety-nine in a hundred of whom are totally unqualified to practice any branch of the healing art; but to call the attention of the profession to some of the faults which lie at its door.

NOTES AND COMMENTS.

BY T. C. MILLER, M. D.

Cimicifuga racemosa. Dr. Fr. Oœsterling classes this plant among his *Stupefacientia acria;* while Dr. Dunglison places it among his Acro-Narcotics. I have observed that when administered to carnivorous animals in large doses it causes nausea, vomiting, increase of sputa, and finally great quietude, debility, trembling, dullness of vision with a slight dilatation of the pupil, and a turning about or striking with the hind feet. Herbiverous animals, to whom I gave the cimicifugia, were affected very slightly or not at all, by it. In animals carrying young, I found it to relax the generative organs, and in large doses, to produce a miscarriage.

I tried small doses upon myself without any appreciable effects, except a feeling of warmth in the region of the stomach. It seemed to increase the discharges from the intestines. In large doses it caused frequent pains through the whole abdominal vicera with occasional sickness, but no marked nausea, a dull headache, diarrhœa with tenesmus, muscular relaxation both of the striated and of the unstriaed muscles

I have no doubt but that it effects the substance of the blood, but how I am not yet able to determine. It certainly increases the quantity of urea, uric acid, and uric salts, perhaps by favoring the transformation of nitrogenized substances.

I observed also that after the medicine had been taken some time it produced a striking change in the skin, and particularly in the sub-cutaneous sensitive nerves, causing a marked sense of itching and burning in it. At the same time it often increases the temperature as well as the insensible perspiration of the skin; and a constant acceleration of the frequency of the pulse.

Its action on the nerves and vessels as well as the organs of the pelvis are very manifest, and excessive doses may cause profuse hemorrhage into the intestine or other cavity.

My entire experience goes to confirm me in the opinion that it produces a *relaxation* of the muscles of a gravid uterus, and thus aids in the birth of the child. In moderate doses it never causes abortion; but I have observed it in large doses to produces abortion in breeding animals.

It sometimes oppresses the stomach in debilitated persons, causing nausea, vomiting, colic, liquid dejections, destroying the appetite and injuring the digestive powers; these effects being accompanied by an increase of sputa, a sense of weight in the head, vertigo, cephalalgia, debility. But these effects are not observed with all patients.

Cimicifuga acts primarily on the spinal marrow and on that part having control of the sexual organs; and secondarily on that part of the brain where the vagus nerve originates. It acts upon the vital function of the nerve to depress or calm it. It also, doubtless, acts on the blood to change the character and condition of that fluid. To all close observers, its action on the vitality of the nerves is quite apparent, particularly on the central organs of the nervous system, as well as on the peripheric group of the fibres of the nerves. In a recognition of this we have an explanation of the fact that it is often of great benefit in neuralgic affections, as for instance in facial neuralgia aud cramps, and in other neuroses; so, also, in pleuritis, onanism, etc.

I have made use of it with satisfactory results in chorea, articular rheumatism, muscular rheumatism, uterine hemorrhage, (in connection with gelseminum and opium,) leucorrhœa, hysteria, spermatorrhœa, retention of urine, incontinence of urine, dysmenorrhœa, amenorrhœa, (caused by diseased innervation,) paraphlegia, cardialgia, hemicrania, infantile convulsions, pertussis, amaurosis, coxalgia, in pains of the bones following syphilis treated with mercury, in engorgement of the liver, in stagnation of the liver and portal circulation, in scrofulous photophobia, in chronic laryngitis and tracheitis, in chronic bronchial and pulmonary catarrhs, in tuberculosis, in inflammation of the mouth and stomach, in spasmodic asthma, and in intermittent fever. I have also recently cured a case of *spinal* epilepsy with cimicifuga, but I find it is not capable of curing *cerebral* epilepsy.

Pneumonia.—Common, cr uncomplicated pneumonia, somtimes denominated croupouse pneumonia, will readily get well without medicine under a strict diet and plenty of bland drinks, as slippery-elm water. Blood letting, or anæmia from any cause retards the recovery.

In adynamic pneumonia, or when the disease is complicated by the presence of miasmata, in drunkards, or when the liver is exhausted or torpid, quinia is demanded.

Fraseria carolinensis.—This plant contains *no starch.* It is indiginous to East Tennessee. When gathered at the proper time it is equal and perhaps superior to coculis palmatus in the treatment of pyrois, indigestion, lack of appetite, and habitual vomiting; but in diarrhœa of childhood it is far inferior to menis pemum palmatum

I have never used it in combination with other agents. Fraseria effects the spleen.

The Function of the Cerebellum.—Sometime since I wrote you that the cerebellum influenced the organs of generation, and based my opinion upon the experiments of Budge.

Valentin has tested this matter, as also did the late Prof. Spiegelberg, both German physiologists. The labors of Tyler Smith and Snow Beck are not original, but only an examination of the labors of Brachet and Serres. Franz M. Kilian, who died all too soon for science, investigated the physiology of the uterus experimentally.

Not feeling satisfied with the labors of others, I experimented on living cats and rabits; and to avoid cruelty I *etherised* them. I employed ether in preference to chloroform, as the latter is too speedy in its action for such small animals, and is less dangerous. I employed in my experiments ten female cats, and eight female rabbits. I will give the results obtained in brief.

1. The cessation of circulation and stagnation of blood, causes a peristaltic motion of the uterus.
2. No excitation of the uterus can be made to pass through the vagus nerve.
3. Excitation of the medulla oblongata influences the uterus.
4. The main nervous centre for the reproductive organs is the cerebellum.
5. Irritation of any portion of the spinal marrow, but particularly in the lumbar and sacral regions, produces an impression on the uterus.
6. Excitations on the central portion of the cerebullum, passing downwards through the medulla oblongata, and thence down the spinal cord to the sacral nerves, affect the uterus. So also, excitations of the uterus by traversing the parts in an inverse direction, affect the central part of the cerebellum.

These facts explain to me the connection between uterine contraction and the activity of the heart. The nerves of both the heart and the uterus have their centre in the cerebro-spinal system,—in the medulla-oblongata, and yet farther up in the central portion of the cerebellum *and very close* to one another.

Convinced of this fact long since, I considered this an explanation of the therapeutical effects of gelseminum, cimicifuga, etc. Most assuredly gelseminum affects the spinal marrow, and cimicifuga affects both the spinal marrow and the medulla oblongata and the vagus nerve; and a trial of these agents in obstetrics will show why cimicifuga is more useful in labor and in pertussis than gelsimenium, is because cemicifugia does, and gelseminum does not, influence the vagus nerve.

Both these agents are valuable in amenorrhœa and dysmenorrhœa, as both act on the uterus. Gelseminum is preferable in epilepsy, because cimicifuga affects the cerebellum less; but cimicifuga is to be preferred in chorea. Stramonium also affects the cerebellum, and secondarily the organs of generation.

Oleum Phosphoratum Camphoratum.—Phosphor-camphorated oil is a valuable external application in pertussis, tenaceous rheumatism, and in catarrhal affections of the meatus auditorious externus. It is made as follows:—

℞. Olive oil, f℥viij.
Camphor, grs. viij.
Phophorus, ʒss.
Oil of Lobelia, fʒj.
Oil of Sassafras, f℥ss.
Oil of Turpentine, f℥ss. M.

Gelseminum in Tenesmus.—In an obstinate case of sporadic dysentery, where every remedy I used failed to relieve the severe tenesmus, and the tincture of gelseminum and tincture of aconite combined had also failed, I added an *infusion* of gelseminum to an infusion of slippery-elm and used it as an injection. Then the disease readily yielded.

Veratrum viride in Dysmenorrhœa.—So far as my experience goes, I have found the veratrum very good in dysmenorrhœa of plethoric patients; but unformly hurtful to those who are anæmic. I have frequently added a little morphia to it with benefit.

Sanguinaria Canad. in Dysmenorrhœa.—I find the tincture of blood-root of value where the distress or difficulty of menstruation is connected with disease of the liver as the primary affection. Large doses are injurious, but small ones may be often repeated.

Crocus in Dysmenorrhœa.—The tincture of saffron is valuable in that form of dysmenorrhœa where the liver is the primary cause of the difficulty. It may be given at the same time with the tincture of blood-root.

Hæmoptysis.—Recently, after a trial of many other agents without avail, and the tincture of gelseminum alone giving only momentary relief, I found a mixture of it with tincture of veratrum viride, in doses of twenty-five drops of the gelseminum with twelve drops of veratrum viride answered completely.

I have also found the extract of rhatany combined with gelseminum or veratrum viride, of value.

Induration of the Liver.—Small doses of podophyllin, in tincture of gelseminum, are admirable in these cases.

Millefolium in Leucorrhœa.—This remedy in my hands has proved itself eminently worthy of trial.

Cancer.—To give relief to the lancinating pains accompanying cancer, I have applied over the cancer, sweet almond oil in which gelseminum root had been boiled.

Acute Bronchitis.—I have often used with benefit in this disease:

℞. Tinct. Gelseminum, f℥j.
Aqua Lupulina, f℥j. M.

Dose one teaspoonfull once in two hours.

Epilepsy.—At times, the tincture of gelseminum has afforded great relief.

Amber.—Dr. Maetke says; "As far as I am acquainted with it, powdered amber finds no other application in the healing art except in Rademacher's *Emplastrum miraculosum*, etc." In Rademacher's Erfahrungsheillehere, he gives the reason for applying that name to this plaster. He states that the plaster was a domestic remedy, used, before he was born. Rademacher *did* make use of a variety of plasters, but has been misrepresented by those who differ from him.

Prof. Rademacher.—As no man in Germany, was so little understood by his opponents, or worse maligned by his enemies, that Prof. Ramemacher, I choose to make a few Notes in regard to him.

Rademacher entered the profession in 1795. My brother, Prof. John Miller, now in Germany, writes that "*he* does not belong to Rademacher's School, but he uses his remedies with great success. The most intelligent, skilful, and successful physicians now in Germany are more or less closely followers of Rademacher. Dr. Carl Kissel, since the death of his great master, is at the head of that school, and few are his equals. He is one of the most successful physicians of the present age. All the Professors and physicians who are unable to obtain practice, are accustomed to attack Rademacher, but as Dr. Kolk has said, without ground, reason, or justice."

Rademacher' *Erfahrungsheillehre* was first published in 1841—and in 1852, four large editions of the work been had published. His school has made astonishing progress in therapeutics and *rational medicine.* I consider him a true Eclectic, and that has led to the opposition of the old school to him and his teachings.

Erysipelas.—In some very severe cases of erysipelas I gave of the tincture of veratrum viride, six drops every three hours, and each morning a small dose of podophyllin. In some cases where the brain was affected I gave six grains of sulphate of quinia at a dose, once in eight hours, in conjunction with the veratrum.

Pertussis—Oxide of Zinc.—In the latter stages of whooping cough I find the oxide of zinc, in connection with the sulphate of quinia, quite valuable. Small doses seem to act better than larger ones. Tannic acid is also frequently indicated.

Chalybeates—Iron should never be given in the enormous doses advised by some. One or at most two grains at a dose, and repeated two or three times a day—and from four to eight days, with an intermission of a few days, and then its use recommenced, will do far better than its continuous use. Boerhaave said: "Give chalybeates in the most simple form, and we will have all we desire."

Gelseminum applied Externally.—So far as my experiments with the external use of the tincture of gelseminum in my practice extends, it has not always answered my expectations. I procured a *distilled water* of gelseminum, in which was a little alcohol to preserve it from decomposition, and that has pleased me very much.

I have used it in various cutaneous affections, as prurigo, herpes, impetigo, achne, rosacea, etc. I applied compresses wet with the water to the parts. In pseudo-erysipelas, painful cancerous growths, as an injection in gonorrhœa and flour albus, in painful, irritable, acute and chronic ophthalmia in combination with strict seclusion from light, in opacity of the cornea, and even in amaurosis, I have been pleased with its effects.

In a very painful scirrhus of uterus it was preferable to anything else. It has also proved useful applied to painful hemorrhoids. In neuralgic pains I prefer the tincture. The water has also proved beneficial in whooping cough and spasmodic affection of the lungs, applied by inhalation. It quickly subdues the painful itching of the genitals. It also relieves headache, and the pain of hydrocephalus, and of inflammation of the brain.

I add the water of gelseminum to elm bark to form a poultice to be applied to inflamed surfaces, swellings, tumors, abscesses, ulcers, or any difficulty where a soothing emolient poultice is required.

Acohol must always be added to the distilled water, or it will decompose and in a few days become useless or hurtful.

PILLS.

BY PROF. J. F. JUDGE.

Pills are far from being the most approved form for administering medicines, which we desire shall immediately produce their effects upon the system. For such purposes medicinal solutions are much to be preferred. But, when it is desired that the medicines be slowly absorbed, or produce continued, rather than instant effect, or when it is desirable that they shall pass down the intestinal canal for some distance before they have entirely entered the circulation, *pills* answer well the indication, and afford us the opportunity of administering disagreeable medicines without offending the taste.

Pills are globular masses of medicinal matter, suitable in size to be conveniently swallowed. If pills are made too large there is difficulty in swallowing them, while if made excessively small, the number to be taken at a dose, may be so great, as to become an objection, hence the size of a pill becomes a matter of no small importance.

The constituents of a pill consist of the *active ingredients*, and the *excipient.* The former includes all of the medicines which entering into it and are essential to fulfill the indications in the case for which the pill is prescribed. While the latter includes all substances which are added with a view to impart the proper consistency to the mass, so as to enable it to assume the pillular form. When the *active ingredients* are in the solid form, they need excipients which shall posses more or less fluidity, and shall either be adhesive themselves, or capable of developing a latent adhesiveness already existing in the active and solid ingredients. When the active ingredients are fluid or semi-fluid in form, the excipients to be used are solids.

When the active ingredients are in powder, but contain a gummy or mucilaginous principle, the excipient frequently resorted to, is water, which by dissolving in part the adhesive principal of the powder, enables it to agglutinate and assume a pillular consistency. In some instances too much water may be added, rendering them too soft to maintain the globular form. When such is the case, the excess of water may be readily removed by heating the mass over the water-bath for a short time. When the powder is resinous in character a little alcohol may be added, which by dissolving a portion of the resin, developes its adhesiveness, and therefore is a proper excipient for such substances.

If the solid ingredients are not possessed of latent adhesiveness, the excipient must be adhesive itself, and capable of imparting this property to the mass when incorporated with the non-adhesive substances. Of this class of excipients, syrups, mucilages, soaps, and soft extracts are the most commonly used. Syrup forms perhaps, the most preferable excipient of this class, and uncrystallizable sugar (Melasses) is preferable to the crystallizable. If the uncrystallizable sugar is not sufficiently pure it may be dissolved in water, percolated through animal charcoal, and then be evaporated to the proper density. Sugar in addition to its adhesiveness, is an antiseptic, and hence prevents the vegetable ingredients from undergoing chemical changes which are liable in the moist state to take place. It also tends to prevent the per oxydation of iron, when the becomes an ingredient of pills. Pills made with molasses remain soft for a long time. Resins, resinous extracts, or gum-resins are to be made into pills, by adding soap, proof-spirits, alkaline solutions, extracts or mucilage.

Fluid substances are made into pills by the addition of such excipients as powdered gum arabic, or tragacanth. Volatile oils, and oleo-resins are generally made up with special excipients. Balsam copaiba or similar substances, which contain a resin, and volatile oil may be made up by adding to them a sufficient quantity of carbonate of magnesia, which in the case of copaiba is about equal parts of each; but, sometimes the copaiba is very fluid and contains a larger quantity of the oil than is common. In such cases it may be necessary to add still more of the magnesia, or, if this is not desirable a portion of white wax may be first melted with the copaiba and after intimate mixture, the requisite quantity of magnesia may be added. The magnesia performs its part by uniting with the resinous acid of the balsam to form a soap, which absorbs the volatile oil. In some instances quick lime has been used advantageously.

Such volatile oils as pimento, peppermint, and cloves are sometimes prescribed in pill form, when the excipient preferred is soap. Creosote, and croton oil may each be made up with crums of bread. It may be well to recollect that effervescent salts should never be given in pill form unless the water of crystalization be first driven off. And that delquescent salts should not be so given. The former if not dessicated cause the pill to crumble, while the latter by attracting moisture, render the pills soft, and cause them to flatten and run together.

The mixing of the ingredients is to be carefully performed, so that the mass when cut shall present an uniform appearance. To accomplish this, it is necessary that all solids which are not freely soluble in the excipient used, shall first be reduced to fine powder, so as to permit of the particles being thoroughly distributed, for the purpose of giving to the several pills which may be made from the mass their due proportion of each of the several ingredients. When several powders are to enter into a pill, and one of them is more active, and administered in less quantities than the others, it is necessary to thoroughly mix the powders before adding the excipient. This is best accomplished by placing the less active powder in the mortar first, and the more active ones afterwards, on top of it. Then by carefully rubbing them together with the pestle, the mixing is accomplished. Care should be taken that this be done well. Next it is necessary to add the excipient; if an extract be used small quantities may be added from time to time, till a sufficient quantity be used, beating the mass well with the pestle so as to force the particles of powder to become thoroughly imbeded in the extract. When syrup is used the entire quantity required may be at once added, and then worked with the pestle as above directed. In making the mass care should be taken to add such a proportion of excipient as to impart plasticity to it, and yet leave it suffictently firm to retain the globular form when made into pills. If the mass is too firm, or not sufficiently adhesive, it will be difficult to work it into pills. While if it is too moist the pills after being made refuse to retain their form, and become flattened.

The mass having been prepared, the next step is to separate it into pills. This is effected by removing it from the mortar and causing it to assume the globular form, when it may be placed upon a pill tile, or in the absence of the latter, upon a pane of glass, and rolling it under the blade of a spatula until it is formed into a cylinder of the diameter it is desired to have the pills. This done, it may be cut into as many equal pieces as there are pills to be made, then each piece should be rolled between the thumb and index finger, till it has imparted to it the proper form.

To prevent the pills from adhering to each other, the pill tile or the fingers of the operator, it is customary to roll the pills in some dry powder, as powdered liquorice root, or carbonate of magnesia.

Frequently pills, are coated with some substance which shall either be pleasant to the taste or tasteless, this being done to disguise the unlpeasant flavor of the medicine. Several substances may be used for thus purpose. Covering the pill with gold or silver leaf was early resorted to, but should never be done since these metals resist the solvent powers of the fluids of the stomach and bowels, and frequently pass away from the patient in the same condition they were in, when swallowed, thus the covering defeats the purpose aimed at in administering the pills. Gelatine may be used to cover pills, and while it conceals the unpleasant taste of the medicine is capable of solution in the stomach. To coat pills with gelatine, take of Gelatine (pure glue) one part, water two parts and form a solution by heating over a water bath.

The pills made in the usual manner, but *not* rolled in powder, are next to be placed upon pieces of wire sharpened at each end, hair-pins when straightened will answer very well. There should also be a cushion at hand to stick the pins in, when the pills are placed like heads upon them. Having thus thrust one pill on to each wire, they are to be dipped into the warm solution of gelatine, and turned around so that they may be evenly coated. The free end of each pin is placed in the cushion after the pills are dipped in the gelatine and allowed to remain there ten or twenty minutes, when the pills will be sufficiently dry to be taken off of the pins and be placed in a tray to finish drying, to do this heat the pin in the flame of a lamp and withdraw from the pills If it is desired to give the pills a finished appearance the hole whence the wire was drawn may be touched by a camels hair pencil, which has been dipped in the solution of glue. Pills thus coated retain their softness and medicinal virtues for a long time.

If it is not desired to coat with gelatine, gum, starch and sugar may be used, thus: Place the pills in any suitable box and add enough syrup to coat them and moisten their surfaces, then add continually till the covering is completed a powder made of powdered Gum Arabic, powdered white sugar, and starch, equal quantities of each shaking the box after each addition. M. Callaud has found the following to be preferable to the sugar and gum, since it is less liable to absorb moisture from the atmosphere, and does not crack as readily as gum when dry. Take of flax seed one part, white sugar three parts, water a sufficient quantity; Mix and boil over a water bath to form a thick mucilage. The boiling is to be continued (over the bath to avoid burning,) to dryness. The mass is then reduced to powder, and kept ready to be used. When pills are to be coated with it they are to be moistened with a little water, and then rolled into this powder, of which a sufficient quantity will adhere to coat the pills. In certain cases the following may be used: Take of Tragacanth one part, water two parts, sugar of milk twenty parts, mix the gum and water and form a mucilage, which strain through a linen cloth and then mix with the sugar of milk. Afterwards spread the plaster in thin layers to dry; this done, the dry mass is reduced to powder and used by moistening the pills with water and shaking up with the powder which then adheres to them.

Pills when dispensed to the sick may be placed in boxes made of wood or paper. But when kept in the physicians' office should always be placed in closely stoppered bottles, to prevent their drying.

GELSEMINUM.

BY LEWIS E. MILLER M. D.

Gelseminum when given in *small* doses produces a pleasant feeling of languor or rest, controls the vascular system by relaxing the muscles of the heart and blood-vessels, and particularly causing an inability to move the eyelids.

In *large* doses it causes dilitation of the pupils, a peculiar giddiness or swimming of the head, disturbed vision, a brief stupor or sleepiness, but without the *mental* impressions which accompany intoxication. These symptoms are not invariable however, and in rare cases they are but slight, or not in any degree present. The *relaxing* effect of gelseminum by no means corresponds with its mental influences, as, it produces relaxation even when the head remains unaffected.

Gelseminum appears to act on the entire nervous system. Primarily it acts on the medulla oblongata; and secondarily, on the cœliac plexus, and thence on the organs of reproduction.

Gelseminum, doubtless, in some way, affects the organs of assimilation and change, and particularly the organs of respiration, interrupting the oxygenation of the blood, and also the elimination of carbon and hydrogen from the blood. Under its influence the heart looses its force, the the pulse its frequency and resistence, and hence follows debility with impurity of the blood. But the powers of respiration sink with the depression of the heart, so that along with the lessened pulse there is observed a lessened force and frequency of respiration, and a corresponding depression of the temperature of the body.

In still larger doses, gelseminum disturbs, seriously, some of the physiologico-chemical processes of life, perhaps by producing a partial paralysis of the brain and the spinal cord; and partly by its influence on the circulation and respiration. It also induces the cramp of debility or weakness, and if the spasm is of the glottis, it thus produces death.

Gelseminum seems very much influenced in its action by the condition of the organism on which it acts; and hence we cannot always tell precisely what its influence will be. In some cases it produces a peculiar impression upon the cutaneous extremities of the sentient nerves. It has also at times, a curious effect on the nerves of the pelvic organs. Very large doses are apt to produce congestion of the vessels of the pelvic organs and of the large intestines. All these phenomena I attribute to its primary influence upon the nervous centres.

Recently repeated experiments by myself and my brother on animals, which we killed by large doses of gelseminum, lead to the conclusion that death usually ensues through a paralysis of the life of the nerves, and thence through the extinction of the functions of respiration and circulation. Its action upon the nerve fibres is marked.

As a therapeutic agent, gelseminum is highly useful in many forms of both acute and chronic disease. In inflammation of the meninges of the brain, particularly of children, in inflammation of the serous membrane in the head, the chest, and the abdomen; in carditis as well as in pericarditis; in inflammatory rheumatism, especially involving the heart, it will be found of extreme value.

In erethism of the nerves with increased sensibility of any organ, which manifests itself by flying pains, great restlessness, and pasms; in all forms of fevers, especially if accompanied with irritability, restlessness, wakefulness, pains, or delirium, it should be given in moderate doses frequently repeated.

It is one of the best and safest remedies to be used in the treatment of disease in children where the nervous system is affected by the process of dentition, and nervous erethism; or if convulsions are produced thereby. So also in convulsions and eclampsia in adults.

In many painful diseases to which females are liable, as amenorrhœa, dysmenorrhœa, menstrual colic, hysteric rheumatalgia of the veins of the hips and thighs, I have found it *the best* remedy known to me.

In obstetrical practice I have used gelseminum to a great extent, and always it has proved reliable and valuable.

For three years past I have used the tincture of gelseminum in combination with the tincture of veratrum viride when I wished to reduce the pulse *without any nausea or vomiting.* I ordinarily give twenty drops of the gelseminum and three drops of the veratrum viride as a dose for an adult. This combination is of value in neuralgia, whooping cough, cough, hypochondria, and many other forms of disease. It may be well to know that in many regards one of these agents is the proper antagonist of the other.

EMETICS.

BY PROF. CLEAVELAND.

Emetics are prescribed for fulfilling a variety of indications, among which the following are the more prominent —

To *remove the contents of the stomach*, whether those contents are poisons, undigested food, crudities, or unnatural secretions in that organ.

For this purpose we should always select those which produce little or no nausea ; for all the nauseants are sedatives, and therefore favor the absorption of the contents of the stomach into the circulating fluids, and this must be especially guarded against when those contents would prove injurious after absorption, as when any narcotic, or chemical poison has been swallowed.

The class to be chosen for the simple purpose of emptying the stomach, includes the *irritating emetics*, and they are peculiarly serviceable, as they usually act almost immediately on being admitted into the organ.

To expel a foreign body lodged in the throat or œsophagus, we may use the same class of emetics, provided we can pass them by the obstructing substance. We may also under the same circumstances use those emetics which produce free endosmose of the blood serum into the stomach ; or if the patient cannot swallow any fluid past the obstruction, and we decide upon using an emetic for its expulsion, we may resort to those nauseants which when absorbed from the rectum will produce vomiting, and administering them in injections we can induce free emesis.

Emetics may be given *to promote the secretion of the stomach* and the adjacent mucous membrane ; as in some forms of dyspepsia, (torpor,) torpidity of the liver, or of the pancreas. For this purpose it is often well to combine an agent that will produce stimulation of the mucous membrane with a nauseant; as a solution of the carbonate or hydrochlorate of ammonia with a solution or nauseating emetic. By this means while the blood will be invited to the mucous surface, the ducts of the gland and the blood vessels, as well as the mucous follicles, will be relaxed and allow a more free flow of the secretions.

It is supposed, however, that a proper combination of special stimulants, and special sedatives, or relaxants, might fulfill these indications without the production of nausea or vomiting better than with it.

Emetics have been given to excite nausea, and thus to act as sedative on the heart and the muscles of locomotion, in a great variety of conditions of the system; as in active hemorrhages, in general local inflammations of an active character, especially in acute inflammations of the skin, the mucous membrane, the testicles, lungs, and the synovial membrane of the joints, and some even have given them in inflammation of the structures of the lungs and of the intestinal canal.

In the latter case it would seem that any one would perceive they *must* do harm, and in the former they can do nothing for the patient which would not be done by sedative medicines which do not induce nausea.

The excitation, and muscular contraction attendant on the act of vomiting must increaee rather than allay the inflammatory action; and the exhaustion superadded to the sedation, if the patient be very much reduced by the disease, may carry him beyond the point of recovery.

When it be desired to promote the secretions of the stomach and the adjacent parts, and at the same time depress the force of the heart's action and the muscles of locomotion, the nauseants will be found happily to fulfill these indications, and may be used with decided advantage.

NAUSEATING EMETICS.—All the nauseating emetics require a little time after their absorption into the blood before they produce emesis. It matters not whether they be first administered to the stomach, or to the rectum, or introduced into the circulation from external application to the skin, or through an opening into the vein ; the result is the same.

They are all sedatives, acting specifically on the pneumogastric nerve which is supplied not only to the stomach but also to the heart and lungs, and hence they act to lessen the activity of those organs as well as to produce contraction of the coats of the stomach. They do not tend directly to increase the secretions of the stomach, but sometimes if the viscus is not well filled with fluids they will produce most distressing and debilitating cramp-like contractions of the stomach, extending at times even down the duodenum, and thus provoking a profuse flow of bile, which by the reflex vermicular action of the tunic of the intestine is carried upward into the stomach, and discharged from the mouth.

Not only is the stomach made to contract by these nauseating emetics, but the pyloric orifice is also made forcibly to contract so that the ingesta cannot pass that way, while the cardiac orifice is left patulous, and the set of muscles that are brought into action after the administration of an irritant are also excited by nauseating emetics, but in a less forcible degree. Hence it is that lobelia, ipecacuanha, and other nauseants, are less likely to induce spasm and cramp, than those of the other subdivision.

As the nauseants also are sedatives to the nerves of locomotion, and some of them to the nerves of general sensation, the patients are much less liable to suffer distress from them than from the use of irritant emetics.

This class of emetics, by forcibly depressing the action of the heart and reducing the volume of blood in the course of arteries, as well as by relaxing the general muscular system, greatly favor absorption ; and hence they are strongly, and doubly *contra*-indicated in all cases where a poison has been taken into the stomach. First, because some time must elapse before they can produce emesis :—and secondarily, because while the emetic is being absorbed, it produces, as has been shown, a condition of the system which leads to the more rapid introduction of the deleterious substance which we wish to remove, into the general circulation.

The very marked, and important difference between this and the other classes of emetics should never be lost sight of by the therapeutist, as otherwise irremidable harm might follow the administration of nauseants when over doses of narcotics or other poisons had been swallowed by the patient.

Another fact should be borne in mind in regard to this class of emetics. While most children vomit readily, and hence require but small proportionate doses of irritant emetics, and those slightly nauseating to empty their stomachs, they do *not* bear sedatives well; and as all nauseating emetics are sedatives, they are more likely to produce undue sedation than with adults ; and oftentimes they will not act upon the stomach unless they are accompanied by some active stimulant to overcome their depressing effect. Hence Dr. J. B. Beck, and others, have spoken pointedly of the danger from administering emetic tarter and other powerful nauseants to infants. When the antimony is prepared with wine, the inebriant may stimulate so as to counteract the sedation of the nauseant, but if it be not soon expelled from the stomach the sedative power of the inebriant may be superadded to the emetic, and the child fall a victim to the ignorance or thoughtlessness of the physician. These unpleasant effects are sometimes manifested even when the dose of the nauseant is not large, and not with infants only but with children and adults.

When emetics produce undue sedation, or nausea is too long protracted, it has been recommended to administer alcohol in some form; but as alcohol oftentimes secondarily causes nausea and vomiting, and almost invariably acts as a sedative after the period of primary stimulation has passed by, it must be obvious that a stimulant against which none of these objections obtain must be preferable to an inebriant.

Even creosote, which has been strongly recommended in these cases, is obnoxious to the charge of being a sedative, although its main force is expended upon other nerves than the pneumogastric. When the hyper-emesis is caused by an irritant, it may be that creosote would be more strongly indicated than any other known remedy.

For the purpose of counteracting the sedation of nauseants, the pure stimulants, as ammonia, capsicum, or xanthoxylum, may be used to the extent demanded, and such agents are to be selected as the judgment of the practitioner or convenience may require.

Usually it is not less than twenty or thirty minutes after a nauseant has been swallowed that any symptoms of vomiting are manifested. Those first felt are sedation and uneasiness, with languor of the muscular system, and a manifest decrease in the force and frequency of the pulse. The blood recedes from the lips and face leaving them pale, and as the muscles are relaxed, the countenance appears dejected and anxious. This is soon followed by relaxation of all the muscles of locomotion, and a general coolness and palor of the surface. The eyes become watery and lusterless, the saliva and gastric juice are poured profusely out, and general langour and faintness to a greater or less degree obtains. After this has continued an indefinite period, the muscles of the stomach and abdomen contract spasmodically and the contents of the viscus are expelled.

As soon as this contraction occurs, the abdominal aorta being pressed upon and the circulation through the lungs being impeded by the tension of the diaphragm hindering a free return of the blood from the veins of the face and head, those veins swell with congestion, the face becomes colored, the conjunctiva engorged, the tears flow from the eyes, and this condition of parts continue until emesis occurs and the muscles relax and pressure is removed. This period of relaxation is followed by a feeling of exhaustion for a short time, when the same phenomena are again repeated, and the emesis followed by still more manifest exhaustion and sedation.

Even this class of emetics, by the mechanical action of the stomach which they induce, tend to stimulate its mucous follicles, so that after the first act of vomiting there may be a free flow of tenacious viscid mucous into its cavity.

The irritation extends down the duodenum, and from thence through the duct into the structure of the liver, the spleen, and probably the pancreas, so that as the abdominal muscles contract and the vermicular action is reversed, these secretions, together with the mucous of the duodenum are carried up into the stomach to be ejected with its contents.

As the bile is frequently thrown up either alone or slightly mixed with other fluids, many have supposed it must have been lodged in the stomach previous to the administration of the emetic; but as it is not ordinarily apparent in the fluids thrown off until after one or more efforts have been made to vomit, we are warranted in inferring that it has been carried into the stomach by the action of the medicine.

Irritant Emetics.—In the same way that irritation of the external surface of the body will sometimes cause at the same time the direct contraction of a neighboring muscle and the *reflex* contraction of others at a distance, so does local irritation act upon the surface of the stomach. On the one hand the muscles of the stomach itself are caused to contract so that the pylorous being at the same time forcibly closed, it tends to expel its contents in the wrong direction. On the other hand, a large set of distant muscles are thrown into sudden action. First; a quick deep breath is taken by means of the inspiratory muscles. Then the aperture of the glottis is spasmodically closed so that the lungs being full, the diaphragm cannot be pressed upwards. Then, immediately, the abdominal muscles contract, and being unable to act on the diaphragm, they press on the stomach, emptying it forcibly of its contents.

It is not always that this reflex action of distant muscles is aroused, as not unfrequently the stomach is emptied of its contents by the simple contraction of its own muscles.

Emetics not belonging to the class irritants, act thus locally and at a distance, but this complex action is more distinctly manifested after the administration of irritant, than of nauseant emetics.

Irritant emetics do not produce nausea, although the sense of irritation is sometimes spoken of as nausea. This sense of discomfort and fullness is caused by the inverted action of the stomach, and from the irritation having caused a profuse exhalation of the gastric juice into the stomach. As the inverted action of the stomach aided by the action of more distant muscles causes the ejection of the emetic substance together with the gastric juices and any thing which might previously have been in that viscus, but little inconvenience follows the action of this class of emetics, unless the stomach be preternaturally irritable or inflamed.

This class of emetics are chiefly used when we wish to unload the stomach of any injurious or poisonous substance that may have been admitted into it, and when we wish to avoid the depression of the action the heart, of the lungs, and the tenison of the locomotive muscles.

They are of great value to remove objectionable substances from the stomach before absorption has taken place, as they act *immediately* and *do not* favor absorption as all the nauseant emetics do. These differ again from nauseants in that they do not ever induce emesis by being absorbed into the blood from the surface or from any of the cavities of the body.

ENDOSMOTIC EMETICS.—This class of emetics, in many regards so closely resemble the irritants that they are not unfrequently supposed to belong properly together. These however, do not irritate the surface of the stomach to any considerable degree, or increase the flow of the gastric juice; but acting simply on the well known principle of endosmose, the solution being of greater specific gravity than the serum of the blood, they lead to the free percolation of fluid into the stomach, and as the organ fills up, it contracts and throws out its entire contents, including of course the blood serum, the solution, and any substance which had previously obtained lodgment there.

These emetics do not act as speedily as the irritants, but do so more readily than the nauseants. As they do not depress like the former, or favor absorption like the latter, and do not leave any irritation of the stomach, they are sometimes preferable to either,—both as a means of removing any injurious ingesta, and also lessening the quantity of the circulating fluid. The applicability of these emetics in cases of dropsy or many varieties of fever will be apparent to the pathologist.

The endosmotic emetics may always be combined with the irritant emetics, in all cases of poisoning with opium, or other anodynes; and if administered before much of the poison is absorbed, may be all the medicine needed.

EDITORIAL DEPARTMENT.

BEDS FOR THE SICK.

It is frequently observed that physicians know far less in regard to the preparation of *Foods*, and *Drinks*, for the sick, than they do in regard to the medicines to be used for the removal of disease. In the College Journal for August last, we endeavored to present a few ideas which seemed to us timely and of value in regard to Drinks, and in accordance with the design of furnishing our readers with practical matter rather than with a display of scientific attainment, we now shall devote a little space to the consideration of *Beds* for the sick.

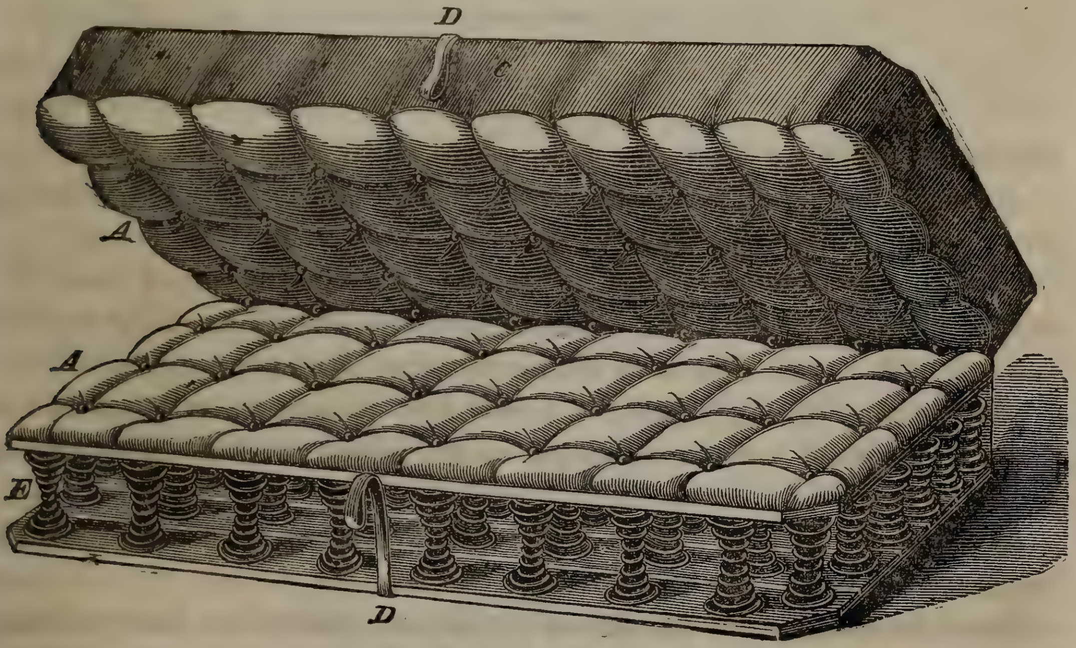
A properly arranged couch, for one who is racked with pain, scorched with fever, and obliged to remain in unwilling contact with his bed both day and night, is a blessing which should never be denied to an invalid; and with proper thought, knowledge, and attention on the part of the physician, can be secured under most circumstances. At all times and places, *feathers* must be entirely discarded as a material for beds for the sick. Some well persons can endure to sleep a few hours each night upon feathers, without any very obvious physical suffering; but as well might a sick person have cold sausages or fat bacon for his diet, because well ones have partaken of such food and survived the experiment, as to be made to sleep on feather beds, because such beds do not destroy outright the lives of the well.

Under all circumstances of civilized life, where a physician can be of any avail, he can have all collections of stale feathers or other abominations removed from the bed of his patient, and their place supplied with a proper bed-sack filled with clean oat, wheat, or rye straw. But this straw should not be merely *stuffed* in the sack. As much time and thought should be given to the proper filling of a bed-tick with straw, on which the patient is to lie both day and night, as is given to the preparation of a single bowl of broth or gruel.

The straw should be placed *across* the bed, in a parallel manner, a small quantity at a time, with the ends carried out fully to the side of the bed tick, and with the tops of the straw in either direction so as to make an even, uniform, flat couch, of sufficient depth and elasticity to be pleasant; and the straws kept in its place by means of threads or small cords passing through the tick and straw from top to bottom, often enough to make the bed into a cushion. Straw beds should never be *made up*. If properly arranged, the body of the patient will lie *across* the straw, with no possibility of forming uncomfortable depressions in it; and as soon as the straw becomes much broken it should be removed and replaced by more, fresh and pure. The price of two cigars will usually purchase enough straw to fill a bed.

Whatever the material of which the bed proper is composed, it should first be covered over with a spread or quilt, and if the sheets are liable to become wet, an oil cloth or India rubber cloth, or something impervious to moisture should be placed upon that, and above all the sheet should be spread evenly and carefully pinned at its edges, so as to keep it in its place without any wrinkles, or danger of derangement. Sometimes a sheet folded to the proper thickness, should be placed *upon* the one which covers the entire bed. The sheets should be changed or aired quite often, and the spread or quilt under the sheet should be changed and aired daily.

But it is not always convenient to command the luxury of a bed freshly made of clean pure straw, especially in the city, and in hospitals; and many substitutes have been devised. Those mattresses made of husks have been quite favorably received, but do not answer a good purpose for those sick who are liable to be confined long to a couch. They retain too much heat, and too much of the gaseous and other emanations of the body; and are too seldom changed. The same may also be said of moss, sprung hair, and other mattresses; and they all are liable to *sag* in the centre so as to form a trough for the body of the patient.



Wells's Folding Mattress.

Mattresses mounted on coiled and other springs, are not liable to the last objection, but they are usually so unwieldly as to be very unmanagable, and hence are not *aired* as frequently as they should be. But for some months we have been sleeping on a mattress the invention of Mr. Wm. Wells, which seems an improvement in several important particulars on all forms of mattresses heretofore manufactured.

It is a spring-mattress, and so arranged, as is shown by the above engraving of it, as to be readily folded to be carried up and down narrow stairways, or through narrow doors. It is light, and when folded quite compact; and can readily be arranged so that the head shall be considerably elevated above the foot. It can also be changed in position so as to be ventilated or aired without removing the mattress from the springs.

The cushion is represented at A A, mounted upon springs, B, in the ordinary manner, and clothed or covered round the edges with cloth.

Let A A represent the head or foot of the mattress, then the framework within which the springs are arranged, is sawn apart from head to foot, and the upper parts of the frame are joined together by hinges so that they may be folded together from side to side, by taking hold of the straps at D D. The cushion is also folded inside, so as to be protected in transportation by the frames which surround it. But whatever the material or the form of the bed may be, it is as much the duty of the physician to understand and direct in regard to it, as in regard to the diet adopted, or the medicine made use of.

BOOK NOTICES.

The Physician's Memorandum for 1860. By C. H. Cleaveland, M. D.

As the briefest method of presenting the characteristics of this book, we copy the *Preface* entire:—

"In the preparation of The Physician's Memorandum, I have endeavored to combine as many ideas, which would be found of special value to the practitioner as a Remembrancer on topics of *immediate* interest, but which, perhaps, he could find presented in detail in his library—as could well be condensed in the space allowed in a volume for the pocket.

In this little volume will be found many matters of interest, which are arranged in a manner somewhat peculiar.

The Classification of medicines is unique, presenting nearly all the medicinal preparations in use in this country and Europe, and so arranged as to indicate—1st, the Classes to which they belong; 2nd, their usual modes of Preparation; and 3d, the Dose of each preparation.

The arrangement of this portion of the book will, it is hoped, render it of special interest and utility, and worthy of frequent reference.

The Abbreviations will be found to be of daily convenience.

The chapter on Accidents and Emergencies, will be found to possess a value beyond computation. But a glance at the many useful ideas contained in that paper, and a consideration that with this book the physician can refer to them at any moment, and will find there a plain and sufficiently explicit guide, will convince any one that this alone is worth more than the price of the work.

The subject of Poisons and their Antidotes, which is a sub-division of "Accidents, etc," is very full, clear, and explicit.

Too often do physicians feel the need of definite information in regard to the proper method of making Post-Mortem Examinations for the purpose of subserving the ends of science, or of justice. In the paper furnished by Prof. Howe, full instructions, drawn from the writer's ample experience, are here given.

Prof. Howe has also given full and clear directions in regard to the Preservation and Embalming of bodies for transportation, and delay of burial. In this will be found the secret methods made use of in the Medical Colleges, of preserving bodies for dissection.

The remarks in regard to the Prescription of Medicine, although brief, should not be overlooked. One of the principle duties of the physician is to prescribe for the sick, yet he too seldom is guided by definite and rational information or rules in the matter; and the frequent expressions of want of confidence, in the science of medicine doubtless, often have their origin in the neglect of the proper understanding of this important matter.

The Memorandum of Practice, and General Memorandum, do not differ materially from those found elsewhere, but are somewhat simplified, and, it is thought, otherwise improved."

Nothing farther need be said, than that this work will be found to contain a complete "Visiting List;"—that it is bound with a *tuck* for the pocket;—is made of the best material; and will be admitted by all to be far superior to any other work designed for similar purposes. Price $1.00.

Sundry Papers on Medical Education, etc. By Charles Fishback, M. D., Indianapolis 1859.

The importance of a thorough and efficient education preparatory to the practice of medicine, renders the subject of deep interest to all, and any examination of the matter which exhibits the short-comings or failures of the present methods, or proposes any changes for future adoption, can hardly fail of rousing deep feeling.

Dr. Fishback is an earnest and independant thinker, and has gone into his work as Chairman of a Committee appointed by the Indiana State Medical Society, with a will that can hardly fail of making an impression on the profession in this and neighboring states; but he will never be able to induce others to believe as *he* does in regard to Medical Colleges and those who are connected with them.

A New and Comprehensive System of Medicine and Therapeutics, arranged upon a Physologico-Pathological Basis, for the use of Practitioners and Students of Medicine. By CHARLES J. HEMPEL, M. D., Professor of Materia Medica and Therapeutics, in the Homœopathic Medical College of Pennsylvania. Philadelphia: William Radd, 1859.

THIS work presents a more complete, scientific, and satisfactory exposition of *Homœopathic* Therapeutics than any other in the English language, and will be read with more interest by those not of the Homœopathic faith than is usually felt in the works of that class of physicians.

Prof. Hempel has refused to yield up his manhood or reason and become the blind unreasoning follower of the leader, who perhaps *assumed* so much that is palpably false that his reasonings and opinions have not had the attention generally paid to them which they deserved; and this independant, honest, manly avowal of the Professor's opinions, while it may give offense to a few of the more straight-laced partizans of homœopathy, will many times over redound to his far greater credit than the little advantage which could accrue from the too frequently adopted cause of attempting to aid a *cause* at the expense of truth and science.

The world has sometimes been cursed for years from the opposite course having been taken by some persons who have striven for leadership; and while we would deem it our duty to censure in strong terms where censure and condemnation is demanded, we are bound to express our approbation of the right when the right is pursued. And we predict that the author of this work will have occasion to rejoice at many tokens of approbation of his course in spite of any influence the strict sectarian member of that school can exert against the book.

In his Professorial labors, as well as in the publication under consideration, Prof. Hempel has shown himself to be very progressive and liberal; and has done much to remove the foolish notions which have obtained in regard to *symptom hunting*, *infinitismal doses*, and other vagaries introduced by Hahnemann, and repeated, parrot-like by his more bigoted followers.

Some eight years ago, Dr. Holcomb of this city, published a book on the "Scientific Basis of Homœopathy," and Hempel's Materia Medica will aid to complete what Dr. Holcomb commenced in rooting out what he has properly styled the "balderdash," "childish verbiage" and "baseless speculations" arrogantly dignified by the term *law*, by those who have written homœopathic works.

An Essay upon the Practice of Medicine. By James W. Price, M. D. of Washington, Ga. From the Author.

Like many Essays on this subject, it is fair, but of no practical or scientific importance to the profession.

Pathological and Practical Observations on the Diseases of the Alimentary Canal, Œsophagus, Stomach, Cæcum, and Intestines. By S. O. Habershan, M. D., etc., etc. Philadelphia: Blanchard and Lea, 1859. Through Geo. S. Blanchard.

Many in the profession are already acquainted with this work, which was reprinted and published in the *Medical News and Library* during the past and present year.

Although Budd, Jones, Chambers, Brinton, and others, have recently published valuable books on the Stomach and its Diseases, many points of Physiology, and especially Pathology and Therapeutics demand farther elucidation; and hence all well-written and scientific treatises will find a welcome from the profession.

A part of the facts embodied in the present book has been already offered the profession in other forms. Most of the remarks on diseases of the œsophagus were embodied in the Reports of Guy's Hospital for 1855 and 1856.

In regard to the so-called functional diseases of the stomach, the resources of modern chemistry have been made available, and some obscure points have been made plain. So also, the physiological connections of the sympathetic nerve and branches of the semilunar ganglia, are brought into requisition to explain the origin and source of some of the symptoms of dyspepsia.

To illustrate both the views of the author, and the style in which they are presented, we make an extract in regard to the treatment of muco-enteritis:—

"It is exceedingly unadvisable to try and produce action on the bowels by violent purgative medicine, as by jalap, senna, scammony or blue pill, croton oil, crude mercury, and the like. The peristaltic action is checked by the inflamed state of its coats, and additional irritation retards it still farther."

The work must prove of value to such as will give it a careful perusal and heed its teachings.

The Treatment of Lateral Curvature of the Spine by Specific Exercises. By CHARLES F. TAYLOR, M. D. New York: From the Author.

DR. TAYLOR has published considerable in regard to the value of *movements*, or specific exercises, in the treatment of various forms of disease; but for the cure of spinal disease he does not depend upon movements alone.

He has found it necessary to resort to mechanical aid; and finding the usual apparatus not to fulfil the indications in all respects, he has devised an apparatus which he styles his "Spinal Assistant," and which he claims embodies a principle never before attempted to be applied to those cases. We append his description of the apparatus illustrated with two cuts.

The special advantages that he thinks are to be derived from this "Assistant," are:

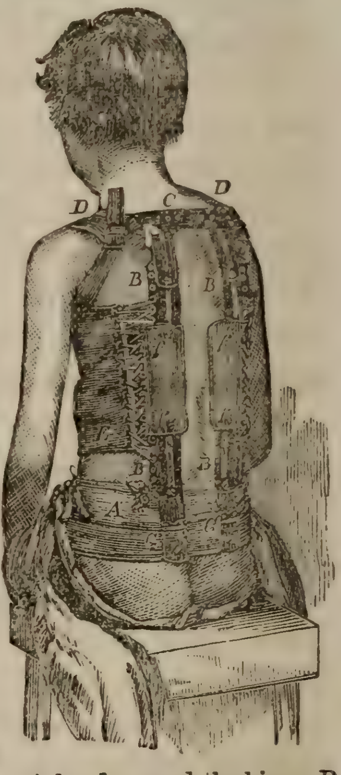
"1. Two Strips pass up the back *each side* of the spine, embracing it, as it were, which, with the band (*E*) around the body, prevent any lateral bending through the point of disease.

2. There is *no* pressure on the projecting (diseased) vertebræ, such pressure being injurious; because (1st) pressure causes absorption and retards resolution; (2d) these projecting vertebræ are already wedge-shaped and form the keystone of the arch or curve; and (3d) to make the fulcrum *here* (at the diseased point where motion should be avoided) makes it the *pivot* of every motion above and below; but

3. Absorption and degeneration of the *Spinal Muscles* is prevented by not subjecting them to pressure.

4. Forward flexion of the spine, through the diseased portion of the vertebræ, is utterly prevented, though the *whole* trunk can readily bend.

5. *Backward* flexion is encouraged, each strip being provided with *threejoints*, hinged so as to bend backward but not forward.



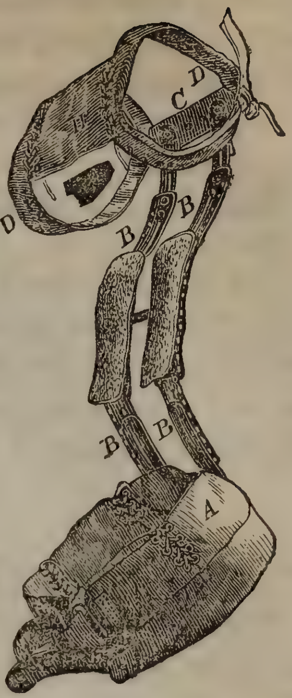
A band around the hips; B B B B uprights each side of the spine; C. cross-piece; D D shoulder straps; E band around the trunk—this is often dispensed with; f f f f G G hinged at f f f f are seen screws which open the hinges and increase (or diminish) the pressure.

6. The Spinal Muscles being thus made to act become developed, and thus the muscles themselves aid in reducing the curvature and become a most efficient part of the apparatus, not only during the progress of the cure, but as soon as resolution and ankylosis take place no further artificial aid will be necessary.

7. Certain active or passive movements, as the case may be—such as develope the muscles of the back and chest, and aid the circulation in the extremities, etc.—are prescribed as a part of the treatment.

8. A healthy nutrition of the muscles contiguous to the diseased vertebræ favors resolution; and

9. The most perfect hygiene can be observed while wearing the instrument."



A, band around the hips B B B B uprights, C cross-piece; D shoulder straps; H strap uniting shoulder straps in front.

In addition to the use of the apparatus here delineated, Dr. Taylor causes his patients to assume many attitudes and positions, for the purpose of restoring equal muscular action, to bring into action the scapular, the longitudinal, the spinal, the dorsal, and cervical, and thus restoring their lost power. The little pamphlet deserves a careful study.

Alcohol: Its Place and Power. By James Miller, Professor, etc. From the Nineteenth Glasgow Edition. Philadelphia: Lindsay and Blakistone, 1859. Through Rickey, Mallory, and Co., of Cincinnati.

The Directors of the Scottish Temperance League, being desirous of publishing a work on Alcohol of indubitable scientific and medical accuracy, applied to Prof. Miller to prepare the treatise, and he furnished the *MS.* of this, one of the most valuable, if not *the* most valuable monograph ever published on the subject. Physicians will do well to read this book and encourage its general perusal, especially by the young and those who have not fallen victims to habits of intemperance.

A Practcal Treatise on Enteric Fever; its Diagnosis and Treatment: being an Analysis of One Hundred and Thirty consecutive Cases, derived from private practice, and Embracing a partial History of the Disease in Virginia. By James E. Reeves, M. D. Philadelphia: J. B. Lippencott & Co., 1859.

This is a very useful and opportune little book:—and specially valuable as an aid to a correct understanding of a form of fever which having been unfortunately called *Typhoid*, is often erroniously supposed to have its seat in the head, or to be manifested by what are sometimes styled "head symptoms."

The Use and Abuse of Tobacco. By John Lizars, Professor, etc. From the Eighth Edinburgh Edition: Philadelphia: Lindsay and Blackistone, 1859. Through Rickey, Malory, and Co.

In this little book, Prof. Lizars has presented a condensation of the observations of many European physicians in regard to some of the more prominent evils resulting from the habitual use of tobacco. It is a very good book, and the publishers have done well in presenting it to the profession in this country.

A Practical Treatise on Operative Dentistry. By J. Taft, Professor of Operative Dentistry in the Ohio College of Dental Surgery. With Illustrations. Philadelphia: Lindsay and Blakistone, 1859. From the Author.

In no department of the healing art has greater progress been made in modern times, than in what is termed Operative Dentistry. All the advances made in physiology, pathology, therapeutics, chemistry, metallurgy, and kindred sciences, are at once laid under contribution by the unceasing activity of our brethren of the profession of Dentistry. Yet, until the appearance of this work, there had been *no one book* that contained what is known of practical value in Operative Dentistry.

Dr. Taft may not have been able to give in his work *all* that is now known, but we have been unable to discover any important omissions, and he certainly has furnished in a very compact and yet lucid form, the Principles of Operative Dentistry, together with a careful detail of experiments, and description of the various manipulations of the art, happily illustrated with a very large number of illustrations which far surpass anything of the kind that has heretofore fallen under our notice.

We feel that we are hardly doing justice to the author, the publishers, and the artist, (Mr. Stillman of Cincinnati,) in saying that for brevity and yet clearness as well as comprehensiveness, for the beauty of its illustrations, and its entire mechanical "getting up," *it has no equal.* We earnestly advise every physician and medical student to procure a copy of it.

A Treatise on Medical Electricity. Theoretical and Practical: and its use in the Treatment of Paralysis, Neuralgia and other diseases. By J. Althaus, M. D. London: Trubner & Co., 1859. From Robert Clark & Co.

There is probably no other remedy employed in the treatment of disease, of the real value of which so little of a positive nature is known by the profession as is known of what is styled electricity. Even in regard to the name by which the agent used should be designated, no two authors even are agreed, and not seldom, as is the case with Dr. Althaus, a number of words having very different significations are used as if they were exactly synonymous.

But without attempting to indicate the many errors of the kind referred to that are to be met with in most works, or even of indicating the valuable ideas contained in the one under consideration, we will express our pleasure from its perusal, and the hope that ere long it will usher into existence a book that shall embody the multitude of facts and principles connected with the use of galvanism in medicine, that which at present are scattered in medical periodicals, or partial reports of its use and value.

◆

Dadd on the Nature and Treatment of the Diseases of Cattle, with Descriptions and Illustrations of various organs and functions of the Animal Economy. Containing also useful and practical information on Breeding, Ventillation, and Diet. By Geo. H. Dadd, Veterinary Surgeon, etc., etc. Boston: John P. Jewett & Co., 1859. From the Author.

Dr. Dadd is so well known throughout the Country as *the best* authority in the land on all pertaining to the diseases of the lower animals, that nothing more than the announcement of a new book by him is required to insure its speedy sale. This new candidate for popular and professional favor will be found to fully meet the expectations of the author's friends and admirers.

◆

Love, (*"L'Amour."*) From the French of M. J. Michelet, of the Faculty of Letters, etc., etc. Translated from the fourth Paris Edition by J. W. Palmer, M. D., etc. New York: Rudd and Charleton 1859. From the Publishers.

This quaint, strange, earnest, serious book, is the result of a life of the closest observation and the deepest intellectual penetration on the part of a man whose strength of mind is only equalled by his purity of heart and love for humanity.

It may not be well for the uneducated to have this book placed in their hands, for the gross and impure cannot comprehend and understand its spirit. But to the refined, especially of the medical profession, and more particularly to those who have passed years in its practice, it must commend itself as one of the most rare and of the greatest worth, of modern works.

◆

The Physician's Hand-Book of Practice, for 1860. By William Elmer, M. D., and Louis Elsberg, M. D. New York: W. A. Townsend & Co. Through Rickey, Mallory, & Co.

This Hand-Book has now reached its third issue, and each year its authors have manifested a commendable desire for its perfection by considerable changes and additions. Last year, the COLLEGE JOURNAL *did not* advise its readers to make purchase of it, and our opinion was sustained by a large number of physicians, who all said that it was too complicated in its arrangement for practical use.

But we probably erred in our appreciation of its object, for the present issue contains such additions over the former as to lead us to suppose that it is *not* intended for a pocket daily companion of the practitioner, but rather as its name indicates, a "Hand-Book of Practice," to be consulted in place of the library.

Its Classification of Disease, Medicinal Weights and Measures, Abbreviations of Medical Properties of Remedies, and Diagnostic Examination of Urine, cannot be considered desirable in a physician's pocket, however valuable to have in a convenient form in his office. Like many young practitioners in their treatment of disease, we fear the authors of this book have *tried to do too much.* It *is* a convenient work for the office, but we think not for the pocket.

Practical Remarks on Yellow Fever, having reference to its Treatment. By EDWARD JENNER COXE, M. D., of New Orleans. From the Author.

THIS is a valuable little book; one that will fully repay a careful perusal; but one which will not bear to be quoted from with the idea of giving the reader any clear idea of of its character.

We would suggest to the author and others having in charge cases of yellow fever, to make a trial of the *Tincture of Gelseminum*, which on our recommendation has proved so satisfactory in the City of Charleston.

An Introduction to Practical Pharmacy; Designed as a Text Book for the Student, and as a Guide to the Physician and Pharmaceutist. With many Formulas and Prescriptions. By EDWARD PARRISH, etc., etc. Second Edition, greatly Enlarged and Improved. With Two Hundred and Forty-six Illustrations. Philadelphia: Blanchard and Lea, 1859. Through Geo. S. Blanchard.

THREE and a half years ago we had occasion to notice this book on its first appearance, and then said, that "it was one of great value, both to the physician and the pharmaceutist, as it contains valuable information in regard to the preparation and nature—pharmaceutical—of many medicines, not otherwise readily attainable. It is indeed, a Text-Book, and as such we wish it might be carefully studied by every physician and druggist in the land."

Since the first edition was published, numerous chemical, physiological, and therapeutical discoveries have added to the resources of the physician, with a corresponding addition to the domain of pharmacy;

and to keep pace with this progress, the author has enlarged his work nearly two hundred pages. It is an extremely valuable and practical work, and just such an one as is needed by the country practitioner.

The Brooklyn City Hospital in 1858, and the Address, by J. C. Hutchinson, M. D. From the Author.

The Address, on the opening of the Hospital, and on the value of *pathological anatomy* as lying at the foundation of all medical knowledge, is a creditable production, but, as we think, fails in establishing the position taken.

Introductory Address, delivered at the opening of the Medical Department of the University of the Pacific, at San Francisco, May 5th, 1859. By Hon Geo. Barstow, and Rev's. Dr. Peck and Mr. Cutter. From the Authors.

These Addresses are very entertaining, and in the future will possess no small amount of historical value.

The Right Word in the Right Place ; A New Pocket Dictionary and Reference Book ; Embracing Extensive Collections of Synonyms, Technical Terms, Abbreviations, and Foreign Phrases : Chapters on Writing for the Press, Punctuation, and Proof-Reading ; and other Interesting and Valuable Information. By the author of "How to write," "How to Talk," etc. New York : Fowlers & Wells, 1860. From the Publishers.

This little volume contains many matters of value, as indicated by its title, and is one of the most useful works that have emanated from the prolific house of Fowlers & Wells.

EDITORIAL ABSTRACTS.

Tin for Splints.—Slips of common sheet tin, cut of the required size and shape, padded with cotton and covered with cloth, are in common use in the Orthopœdic Hospital of London.

Puerperal Convulsions.—Dr. Wellington tried the inhalation of chloroform in severe cases of puerperal convulsions, apparently benefiting all and curing two.

"*Condy's Fluid.*"—This fluid is simply a solution of permanganate of potassa, of the strength of sixty grains to an English pint of water, or about three grains to the fluid ounce. It is applied to foul ulcerated surfaces, with copious offensive discharges.

Rhus Radicans.—Rhus Venenata.—Dr. J. Weston asks :—"When the rhus radicans, or the rhus venenata vescicate if applied externally, is it safe to give them internally? Either of them will poison me badly, even if I go within a few feet of them while I am in a state of perspiration.

I have read somewhere, years since, that the active principle of each was strongly *alkaline*, and acting on the idea, I have found that strong apple vinegar will always cure. For years I have used it, and the cure has been certain and immediate. I write you my experience with regard to poisoning by the *Rhus* family.—R. Toxicodendron, R. Radicans R. Venenata—R. Pumilum. All the above, and several other plants poison me bodily if I touch them or go near them when in a perspiration.

When a boy I suffered greatly every summer in this way. Some years ago, I read, or was instructed by my teacher in *chemstry*, I cannot now say which, that these poisons, were the result of a powerful alkali. After this information, obtained prove where, when I was poisoned, and the burning and itching, and vescication appeared, I bathed the parts thoroughly with apple vinegar. Two or three such applications would always cure.

While I was in the West Indies, several years ago, I frequently got posisoned with something, I know not what. I used vinegar made from sugar cane juice that always cured. I have had occasion to administer to others who were badly poisoned. I have never known a case but what vinegar would cure. Though, when a boy, I would shun with great fear and dread the whole *rhus* family, I have not done so for years I can so easily get rid of their effects. Whether *any acids* will have the same effect as the above I do not know.

Sponge in Retained Placenta.—When the placenta is retained after abortion in the earlier months of pregnancy it is often removed with great difficulty. Dr. Barker recommends the introduction of a compressed sponge into the cervix, both to stop the hemorrhage and excite uterine contraction. An injection of oil of turpentine and an egg or starch, should be thrown into the rectum and retained as long as possible.

MARRIED.

October 4th, 1859, by the Rev. James Robinson, Dr. J. L. Springgate, of Eureka, Ill., to Miss Annie E. Major, of Woodford County, Illinois.

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MEDICAL VAGARIES.

BY H. G. BARROWS, M. D.

Very many errors doubtless crept into medicine from the false reasonings of the ancient alchymists. In some of the ancient works on physic we find "the blood of the goat" extolled for its efficacy in dissolving stones; and from this supposed lithontriptic virtue, it obtained a use as a remedial agent for stone in the bladder. The expression which gave origin to the belief was evidently allegorical, signifying that the blood of the goat, by which our Savior was typified in the Old Testament, was capable of softening the stony hearts of his enemies, or, according to others, that by his influences, the stony rocks and veil of the temple were shattered and rent.

Accident and ignorance have presented to the profession some of its best remedies. We are indebted to an Indian for the discovery of *Bark;* and for our knowledge of *Mercury*, (which the world would have been quite as well off had it never known,) we are appropriately indebted to a madman, one of the wildest of alchymists.

Among the most absurd notions of ancient times was that of the Cornish nurses, who administer a dose of gin and melasses to their smoky chimney corner, whenever a child is affected with the measles, in order, as they say, to *throw out the eruption.*

Anciently, there used to be a remedy entitled "Anodyne Necklaces" which consisted of the roots of the "Hyosciamus," strung in the form of beads and sold under this name, to tie around the necks of children to facilitate the growth of their teeth, and allay the irritation of teething.

One ancient writer affirms that "tumeric" is good for the *jaundice*, because it is *yellow*, and that *foxes lungs* are good for the *asthma*, because that animal has strong powers of respiration, as is proved by the long and hard run he makes, if closely pursued.

Boerhaave believed the blood owed its red color to *iron*, and therefore recommended iron in some female complaints, thus suggesting, what is believed by many to be an efficacious remedy, by a fanciful and erronious theory.

In the Materia Medica of the seventeenth centuary, by Sir Theodore Mayerne, who was physician to three of the soverigns of England, we find the "Balsam of Bats" for hypochondriasis; also remedies from certain parts of adders, sucking whelps, earth worms, the bowels of a mole cut open alive, mummery made of the lungs of a man who died a violent death, etc., etc. Inoculation for small pox was practised in India, Turkey, and Wales, on a superstitious principle. The charm consisted or was supposed to consist in leaving a piece of money as pay for inserting the virus. It is quite probable that the physicians of our day would not object to vaccination, provided they could do so under the influence of *such* a charm.

We smile at the absurdities of what we are pleased to call the *dark ages*, but it strikes me very forcibly that coming ages will laugh at our expense.

By way of amusement, rather than instruction, let us glance at a few of the many superstitions of our nation and century.

Yarn spun by a girl under the age of seven years possesses extraordinary virtues. Linen made of it, furnishes the best bandage for gouty patients, and when wrought into garments, forms a complete coat of mail, not only against the bullet and dagger, but even against the more formidable operation of witchcraft; nay, the very yarn itself can be wound into unerring musket balls.

It can hardly be credited that such a superstition ever found credence with human beings possessing the least intelligence, but, on the authority of books such is the fact.

Again; "when a mouse gnaws a gown, some misfortune may be apprehended." We must admit the truth of the superstition, for any lady would consider it a *misfortune* to have "her love of a dress" spoiled.

Again; "beggar's bread should be given to children who are slow in learning to talk." "To rock a cradle when empty is injurious to the child." We might cite many others, and comment upon them, but time will not sanction it. We have already said, that we smile at the ignorance that could repose faith in these superstitions, but if we will examine society at the present day we shall find that we both tolerate and teach similar superstitions. We have our *lucky* days, upon which we are ready to perform any acts; and our *unlucky* days, upon which we cannot be induced to undertake anything. We seriously tell our children that when the foot is asleep only make a cross upon the top of your shoe with your finger dipped in saliva, and ere it dries the foot will wake up. If our boy spills the salt, we tell him he will be angry before night, and if he whirl the chair upon one of its legs, we assure him he will quarrel with somebody. If he make up faces before the mirror, we tell him that the d—l will appear at his elbow; and thus our children grow up under the impression of the truth of these things, and perhaps in turn to *their* children.

Who has not heard of the timid girl going out into the moonlight with a mirror, and anxiously gazing into it with the hope of seeing the face of her future husband ;—or known of her going to bed backwards, meanwhile repeating some cabalistic sentence, with the expectation that her future lover and husband would appear to her before morning. This is the same spirit of superstition, although, I admit, greatly modified, that existed in former days and with regard to medicine and medicinal remedies. There is, in many quarters, unconquerable superstition remaining. The history of medicine, the causes which have retarded its progress, the errors of its cultivators, the means by which it has advanced, its present state and its prospects, may be beacons to indicate danger, or bright luminaries to guide and direct. The materials thus accumulated are to be reduced to practice.

The practical application of medical attainments forms the continued study of the physician, and demands enlarged medical genius, without which learning and science are of no avail.

The vagaries of medical practice are among the things that were; and the follies of fanatics, the enchantments of empirics, and mysterious innovations of imposture are buired in the grave of forgetfulness. Now, comparatively speaking, the physician has a clean field before him, and instead of consulting the oracle in the heathen temple, he consults the oracle of wisdom which his own experience has set up in the temple of his mind, and draws forth from the treasure house of his knowledge, that, which, by the aid of judgment and experience, he is able to apply to disease with satisfaction and success. He finds before him an extensive field of usefulness, where his talents can be fully occupied, and where he can be an instrument of conferring blessings to the world.

In closing, permit me to add, that these papers contain remarks and quotations of a desultory character, from the fact that they were preserved at various intervals by being penned upon loose slips of paper, and this is the first time that they have assumed anything like a connected form.

AN EXAMINATION OF THE DOCTRINE OF THE SELF-LIMITATION OF DISEASE.—ERYSIPELAS.

BY PROF. J. EMERSON KENT, M. D.

I HAVE shown that whooping-cough and typhus fever, which are, by the regular authorities, classed among self-limited diseases, are not *in fact* what the advocates of the doctrine of self limitied diseases assert; but on the contrary, evidence has been produced in proof of their subjection to, and termination by the modes of treatment therein defined.

I shall next examine Erysipelas,—and hope to be able to convince every honest seeker after truth of the fallacy of the pretensions of those who claim that it is a disease of self-limitation, " a disease which must run its course," and " which is incapable of arrest by any medicinal agent."

The books describe four minifestations of this modification of the primal of the type of all diseases,—*to wit*, *simplex*, *erraticum*, *œdematodes*, and *phlegmonoides*. Whether these distinctions are of any practical value to the student I shall not now stop to enquire; nor shall I in this article discuss the question of the epidemic, endemic, or infectious nature of erysipelas; my attention is to be wholly confined to the single enquiry, can it be arrested in its course by any known medicinal agent, or method of treatment?

Probably in no other modifications of disordered action have so many and so varied local applications been made for the purpose of arresting the progress of the disease; but that all local applications have failed to meet that indication is now generally admitted, at least by every intelligent practitioner. When the constitutional character of erysipelas is borne in mind, the failure of local or topical applications to arrest its progress should not excite even momentary surprise; and in proof of its constitutional nature, thus writes a *legitimate* authority;—Erysipelas makes its attack with grave constitutional symptoms; these symptoms, says another authority; are,—shivering, fever, nausea, and vomiting, alternating with rigors, etc.; and throughout the whole progress of the disease, there is general constitutional disturbance, with well marked paroxysms and remissions.

That erysipelas can be arrested in its progress; that its progress can be promptly cut short, I have hundreds of times proven in my practice; have in at least a score of cases proved during the present season. For years I have discarded every form of depletion in its treatment, assured that depletion not only fails to arrest its progress, but actually induces those "fearful typhoid symptoms" which is graphically described by Wood, and so justly dreaded by the mere routine practitioner. Upon this point, thus wrote the great Heberden:—"This distemper seems to partake of the nature of those which are called malignant more than of the inflammatory; by which I mean that it does not bear or require much evacuation. I have seen very dangerous symptoms follow not only bleeding, but even a gentle purge, though given after the patient had begun to recover."

All modes of depletion only aggravate the paroxysms, and perpetuate their reception; hence the worse than folly of bloodletting, cupping, the exhibition of calomel, saline purgatives, antimony, blisters, etc., all of which are authoratively sanctioned by legitimate authors; and it is because legitamate treatment thus perpetuates the disease, that it has become the fashion of the old school to call it a disease of self-limitation, and therefore incapable of arrest; in this instance, at least, reversing the usual order of the blunders of the regulars, where errors in practice have usually arisen from false doctrines; whilst here, an erroneous practice has created a fallacious doctrine.

The treatment I have found most generally useful in arresting the progress of erysipelas, is,—to give emetine (or aconite) in nauseant or emetic doses during the height of the febrile paroxysms, and full doses of quinia, with, or without morphia, as may be indicated during the remissions, at the same time paying due regard to the functions and the excretions.

But may quinia be administered in the so-called acute forms of disease, and, more particularly, is it a safe remedy in erysipelas? I unhesitatingly, and after years of close observation and extensive practice, answer in the affirmative; always provided the immediate febrile paroxysms has been fully subdued before its exhibition. In all the varied modifications of the disease, whether simple erratic, or when attended with great swelling or effusion of serum; or with tension, hardness or suppuration, I have found quinia the medicinal agent, of all others, the most generally prompt and efficient in the arrest and cure of the disorder,—Not in a single instance out of hundreds of cases which I have thus treated, did I ever find occasion to doubt the perfect safety of the treatment thus recommended. In confirmation of my firm conviction of the safety of quinia in the most acute forms of this disease, I quote from, or refer to the annexed authorities. Says Elliotson, "I have never seen *bark* do harm, even in *active tonic* erysipelas, and in doubtful cases it is always a safe and elegible medicine." Dr. Fordyce says, he "administered bark with the most pleasing success in the several modifications of this disorder;" and the experience and testimony of other eminent practitioners, amongst whom I may name Heberden, Wells, Jackson, and Watson, are conclusive in view of the efficacy and safety of the mode of treatment suggested, and its vast superiority over the topical application, and serious scarifications of the routinists of all schools ; while Dr Williams, of the St. Thomas' Hospital, London, administers *wine* as well as quinia, in all cases, from the very beginning. With such an accumulation of evidence in favor of the use of quinia in this usually uncontrollable disease, we must claim the right to continue its administration, despite the strictures of the so-called "innocuous" school of medical practitioners.

The most useful external agent, is, without doubt, a solution of the cyanide (cyannet) of potassium, from half a drachm to two drachms to the pint ; sometimes a dilute solution of the chloride of sodium will afford much local relief ; and in many cases a poultice of baked apples, to which dilute acetic acid has been added, will be found a serviceable palliative. A cranberry poultice is often of much use ; whilst, occasionally, cold water applications will afford to the patient the greatest local relief.

I submit the following cases :—they at once show the value of the treatment recommended, and prove that erysipelas may be promptly arrested in its course, and is therefore *not* a disease of self-limitation.

Case 1. J. B——, a young gentleman aged twenty-one, consulted me on the 21st. of march, for erysipelas œdematodes. His face and eyelids were greatly swollen, and the effusion of serum was very large ; the eyelids and cheeks were like bladers, distended almost to rupture. The conjunctivea was effused, and of a brilliant red, and the presence of light was intolerable. An application of the Unguent. Argent. Nitrates, one drachm to the ounce, just sufficient to blacken the effused surfaces, promptly subdued the intolerance, etc., and under the already described treatment, the disease was as promptly arrested. On the third day the patient returned to his business, that cf boot-making.

Case 2. Mrs. J——, aged fifty-one, had had erysipelas in the face and eyes for some ten days prior to my first visit, during which time she had submitted to heroic legitimate practice, with a daily aggravation of the disease. I found her suffering acutely; the eyelids were in a state of suppuration, as also several points on the face and temples. Externally a poultice of cranberries was applied, and the treatment as already described, but with the addition of good sound Maderia wine, was adopted. In less than a week the lady was convalescent, and able to resume her domestic duties.

Case 3. Within the past fortnight I was called to attend Mrs. A——, aged thirty-six, who had been suffering under acute erysipelas the three preceding days. I found her face and head frightfully swollen, with excessive effusion of serum. The pain she described as agonizing, and the slightest light was intolerable. She was treated as in the preceding case, the wine only omitted. In forty-eight hours she was convalescent, and the usual light of the room was borne without any discomfort. On the fourth day she was well.

Case 4. I recently attended the daughter, of Mr. Wm. W——. The child was twenty months old, and had been suffering under erysipelas for nearly three weeks, during which time the little sufferer had been treated by both an Allopathic and an Homœopathic practitioner. It was that modification of the disease called *erraticum*. On the tenth day the little one was well.

I might multiply cases by the score, but those already given are sufficient to prove that erysipelas may be at all times arrested in its course, if treated in accordance with newschool doctrines, due attention being had to paroxysm and remission; and that this disease is paroxysmal will not be denied by any practitioner who has closely watched its access and progress,—and if paroxysmal, then, of necessity, it must be remittent. Dickson shows, by numerous quotations from the older medical authors, that in this disease, the phases of the primal type of all disordered action are distinctly seen; indeed few diseases are more prominently marked by paroxysm and remission

The "old school" practitioners have no idea of arresting these paroxysmal repetitions, and thereby arresting the progress of the disease; it is hence perpetuated from day to day, and not unfrequently from month to month; and yet, as we have proved, erysipelas may be cut short at once. In further proof of the true character of the disease under consideration, the following is quoted from the personal experience of Sir James Macintosh.—"We had an unusually cheerful day, but just as I was going to bed I was attacked by a *fit of shivering*, which in the morning was followed *by a high fever*, and soon after by an erysipelas in the face. The disease is liable to such turns that one is always within six hours of death."

In the treatment of Erythema, thus writes Watson, of London: "I am persuaded that after an aperient, rest, the horizontal position, and *quinia* constitute the proper treatment in this affection. I had once a house-maid, in whom the disorder appeared, and was attended with an unusually high fever, and much indisposition. I therefore treated her anti-phlogistically, i. e., I kept her on low diet, and gave her purgatives, *but the disease went on*, fresh knots came out as the old ones faded. At length, I do not know why, I prescribed some quinia for her, and the improvement was immediate and very striking. She relapsed, however once or twice, on leaving off the quinia; but by persisting subsequently in its use for some days, a permanent cure was effected. Since that time now ten or twelve years ago, I have seen a good many cases of erythema, and I have treated them all alike, *viz.*, first with an aperient, and then with the sulphate of quinia, and they have all got rapidly well."

But what has erythema to do with erysipelas? Thus is the question answered by the same authority,—Very closely connected with erysipelas, and continually confounded with it, is "erythema."

I might greatly extend this article, but I think that I have already proved that erysipelas is not a self-limited disease, and that quinia, or some other equally prompt intermittent, and anti-periodic remedy, is the most effective agent for its prompt arrest.

SIMILIA SIMILIBUS CURANTUR IN DIARRHŒA.

BY W. G. BRUCE, M. D.

On the 22nd. of August I was called to Mrs. L——, age 65, slenderly built, dark complexion, hair formerly dark, black eyes, mother of seven children. She enjoyed good health from infancy until within a few years past, when trouble and anxiety, caused by deaths in her family, have weighed so heavily upon her mind as to seriously impair her constitution. There is not an organ or structure in her dilapidated frame which can be said to be in a strictly normal condition, the respiratory organs being subject to attacks of pneumonia, nausea, together with pyrosis, anorexia and gastric derangements generally, particularly gastrodynia biliosa.

With *all* of the above encumbrances, besides many others, too numerous to mention, this lady was of a predominantly nervous temperament, and consequently it was a great cross to her to be compelled to surrender herself to a sick bed. She is one of those individuals who never complain unless something of a serious nature has befallen her, and not then unless pain and prostration render her condition too apparent to be longer concealed. In consequence of this peculiarity, when I was called to her, I found that she had been suffering for thirty-six hours of a very severe attack of Diarrhœa, the discharges being as frequent as once in ten or fifteen minutes.

During this thirty-six hours she paid as little attention to her condition as the severity of the symptoms would allow, being the whole time actively engaged in the performance of her every day duties. And now, an additional train of symptoms were fast manifesting themselves. The oppression and swelling in the region of the stomach, the vomiting, the offensive eructations, the anorexia, the great thirst, the thick yellowish coat on the tongue, the dark color and offensiveness which characterized the discharges, the flatulency, the yellowish color of the face around the nose and mouth, the head-ache in the evening, the full pulse, the complaints of much heat while there was an absence of fever, strongly impressed me with the fact that gastrodynia biliosa had manifested itself.

When I commenced treating the case, the two diseases were raging with great violence. Most offensive discharges of a billious slimy character, every ten minutes, in alternation with much vomiting of great quantities of bile, with severe gastralgia ; and my patient unable to move in bed. I was compelled to treat a violent form of disease which was fast making inroads upon the life of one of my fellow-beings whose constitution had already been shattered. Taking this fact into consideration I came to the conclusion that even the mildest agents we use in such cases would be too harsh in this particular one, and would have a tendency rather to augment the severity of the symptoms than otherwise. I therefore concluded to use the Homœopathic treatment in this particular case.

In my treatment I applied the following Homœopathic remedies. First to check the vomiting I gave ipecacuanha (ten drops in a half teacupful of water,) dose a teaspoonful every fifteen minutes. After the application of three doses, the vomiting entirely subsided. I now commenced treatment of the diarrhœa, and the remaining gastric symptoms. In the same way that I applied the ipecacuanha for the vomiting, I gave corrosive sublimate a teaspoonful every hour in alternation with pulsatilla. At four o'clock in the afternoon I would commence and give at the intervals, between the mercury and pulsatilla, coffee in alternation with belladonna, (ten drops in a half teacupful of water,) dose a teaspoonful, to quiet the nervous system and induce sleep. At the expiration of one day and night the severity of the symptoms had abated ; my patient was very much better. I now gave the mercury and pulsatilla every *two* hours instead of every hour, following up every afternoon with the coffee and belladonna, one dose of each as above.

On the third day my patient was so much better that I gave the mercury, etc., every *four* hours; and on the fourth day I only gave it morning and evening. I kept on giving the medicines morning and evening till the sixth day, following up every afternoon with the coffee and belladonna, when I ceased all medication as the gastric symptoms had all disappeared, the diarrhœa was suppressed, and convalescence making rapid advances.

During the treatment, and convalescence I allowed my patient to eat nothing except a little boiled rice, milk porridge, toasted bread, and gruel. I had this very important matter *strictly* observed.

Will Prof. Cleaveland review the above case, and my treatment of it, and please state through the colums of the COLLEGE JOURNAL wherein he would differ with me in the treatment, and what remedies he would make use of in just such a case, as substitutes for those I made use of? I am exceedingly fearful of harsh medicines in such cases.

REMARKS.—At the request of Dr. Bruce, I remark that I do not see the propriety of the heading of the article he has sent me.

Ipecacuanha was first introduced to the European profession as a specific remedy for diarrhœa and dysentery. It lessens the force and frequency of the heart's action, and hence relieves cutaneous or mucous conjestions. It also lessens the peristaltic action of the stomach, and in larger doses even reverses that action, and thus lessens or relieves tenesmus and tormina, and checks frequent dejections. Its other well-known actions on the system render it valuable in bowel complaints. It has of late been used by many, with gratifying results in diarrhœa, who have *not* supposed it to act on any principle of *similia similibus curantur*.

In regard to giving a *teaspoonful* of corrosive sublimate *every hour* I have no remarks to make, farther than to suggest that while the treatment may be orthodox "*similia*" treatment, but few if any Homœopathic practitioners would expect it to prove "*curantur.*"

Why belladonna should be given in conjunction with ipecacuanha, I cannot understand, or why *coffee* was given each afternoon, along with belladonna. But the patient survived, which satisfied the friends and perhaps the physician that it was the treatment that cured her. But it will not quite satisfy the searcher after scientific truth that the recovery was owing to the treatment pursued, or even that the treatment did not actually retard the recovery. The question for science and experience to solve—is *not*, did the patient recover after a particular mode of medication ;– but what mode is the *best* under the circumstances.

LIGHT, HEAT, MAGNETISM, ELECTRICITY, GALVANISM.

BY PROF. CLEAVELAND.

IN these we have perhaps the only *pure stimulants* known to the profession ; or in other words, they are the only therapeutic agents which produce no other action on the system but that of increasing the functional activity of the parts to which they are applied.

Many other agents are so much more active, as stimulants than they are in producing any other action upon the organism, that we may properly pay but a slight attention to their other properties as compared with their influence as stimulants ; and yet even those which are usually ranked as pure stimulants do make other impressions and produce other changes not due to their influence as stimulants.

When we consider that *vital* force is the result of the harmonious action of the different functions of the organism, and that the different organs of the system are more subject to derangement from want of activity, than from over action ; we shall perceive the vast importance in a therapeutical point of view of those agents which stimulate the organism to an increase of action. But, we must not lose sight of the fact, that the greatest amount of vital force and strength of the system, or the organ, is the result, not of the greatest possible activity of the system, but of an activity which accords with what we are accustomed to consider the *normal* or healthy activity of the organism.

The human mechanism is designed to manifest a certain degree of activity ; and a marked increase of that is as prejudicial to life and health—nay, far more prejudicial to health and life, than an activity below the standard of health. In other words, the organism will be worn out and vitality be destroyed, more surely and more speedily, when the machinery is made to perform its functions with a rapidity greater than that of health, than when allowed to move with a speed below the normal standard.

Some writers, adopting the hypothesis of the ignorant empiric, whose fundamental proposition was :—"Life is heat, and cold is death," have considered all departures from the standard of health to be a loss of activity; and hence have supposed that no agent can be remedial in its action unless it be a stimulant. But even these are fast loosing confidence in their own erronious philosophy, and often use agents for the purpose of lessening the abnormal activity of the different parts of the organism of their patients.

Never loosing sight of the fact that the condition of health is the mean between the extremes of inaction and undue activity, we find in the practice of medicine, almost hourly, the need of a therapeutic agent which shall increase the functional activity of one or more organs of the system, and at the head of the Stimulants we are prepared to place as most convenient of application as a therapeutic agent, that imponderable known as Galvanism.

Many of the most eminent in the profession have advanced similar opinions. Mr. E. W. Tuson, made use of the following language:

" Electro-galvanism may be considered as a stimulant to the nervous system, a stimulant to the most minute fibrillæ, to the most delicate nervous texture, and likewise to the neurilema, or sheath of the nerves; promoting speedy absorption, so that should the sheath, or even the investing membrane of any nervous fibre, be thickened, or enlarged by extravization or other means; by stimulating the nerves, by promoting absorption, and removing the obstruction, the part will assume a healthy action. We have then, an agent in Electro-galvanism, to act upon the nervous system, to excite its action, to restore it to a proper degree of energy, so as to accomplish a cure."

Mr. Abernethy said; " In cases of obstructions to the performance of *any* natural function, Electro-galvanism will be made serviceable in stimulating the nervous action, and thus restoring the organ to a state of health. Electricity is a part of surgical practice that may be considered *unique.* All other means operate on the surface; but electricity will pervade to the very centre of the body. Medicinal agents will do much in the treatment of disease, but Electro-galvanism will do more, and produce a more decided result; and a much more *permanent* advantage may be looked forward to form its proper application."

M. Matteucci, as translated by Dr. Pereira, made the following observation: " Electricity is the *only* irritant which can excite at one time, sensation, and at another contraction, *according to the direction* *in which it traverses a nerve.* The electric current alone, can modify the excitability of a nerve, and even destroy it, when the currents circulates in a certain direction; and preserve, or augment the excitability when passing in the opposite direction. Of all irritating agents, the electric current is the only one which possesses, for a long space of time, the power of exciting the excitability of the nerve, when it has become very much enfeebled in respect to other stimulants." Again, the same author said: "The electric current alone, has the power of awakening the excitability of the nerve when much enfeebled, after a longer interval of time than any other stimulant."

Wilson Philip, in his remarks on the *vital functions*, says: "We have seen that galvanism is capable of performing all the functions of the nervous power properly so called."

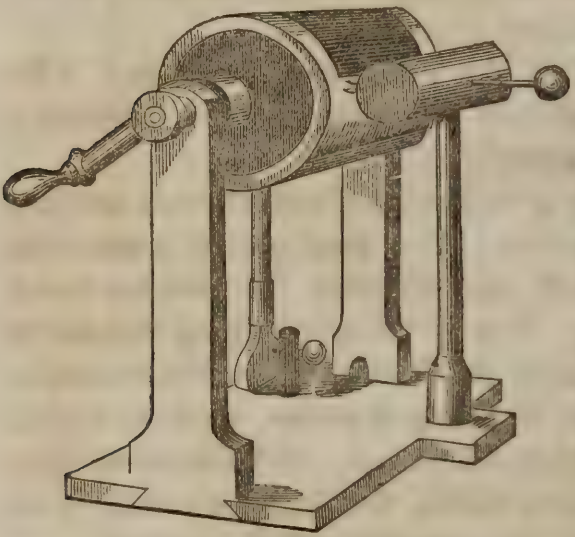
Mr. Abernethy said, Electricity is "a species of *stimulation*, and may be applied in various degrees of force. You must modify it according to the tenderness of the part. If you stimulate the part too much, you will produce inflammation. This is the worst thing that can be done. *It is this practicing without intellect that constitutes empiricism; it is blindly adopting in this way, a power, without a principle to guide it, that I abhor above all things.* It becomes an agent of great practical utility in judicious hands, and under a variety of circumstances can be employed with the utmost benefit."

That over stimulation by means of galvanism will lead to a loss of power was shown by some experiments instituted by Wharton Jones, and witnessed by Webber, as detailed in the seventh Volume of Grey's Hospital Reports. By the application of a small amount of galvanic force, the vessels of the frog's foot were seen to contract; but Webber, and Simon both observed, that when the current was too powerful, or too long continued, the artery lost its power of contraction for a time, and yielding to the pressure of the circulation, an aneurismal bulging of the artery was produced. Dr. H. P. Dewees of New York, in speaking of galvanism, wrote; "To any person using galvanism, I would again observe, that the degree of benefit must not be thought commensurate with the muscular tenison; and this physiological fact should be strongly impressed, *that the organic force is always exhausted by the over-exercise of the functions.*"

It seems to have been more or less clearly perceived by all experimenters, that electricity and its kindred agents are simple, pure stimulants, and also that this stimulant could be applied so as to impress a particular part of the system, without acting upon parts at a distance,—that its action can be *localised*, thus doing away with the great objection which obtains against medicines which are administered through the stomach.

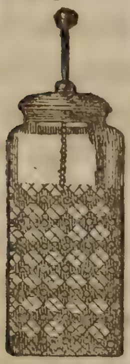
To make electricity, electro-galvanism, and galvanism more readily applicable to the treatment of disease, a vast varieties of mechanical contrivances have been devised and offered the profession, some of them very admirable as mechanical contrivances, and yet of little value to the physician, and others far more simple, and perhaps more useful *because* of their simplicity.

Fig. 1.



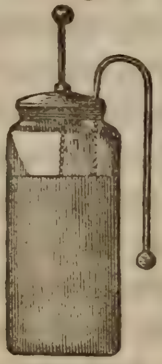
Cylindrical Electrical Machine.

Fig. 2.



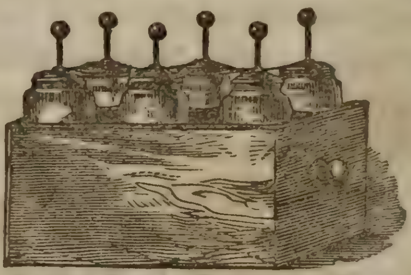
Leyden Jar.

Fig. 3.



Leyden Jar.

Fig. 4.



Leyden Jars in Combination.

The old-fashioned cylinder Electrical Machine (Fig. 1.) delineated in the cut, was the one mainly in use in times past; and with the use of one (Figs. 2 & 3) or more leyden Jars either separately, when but a slight shock is required to be produced, and which experience has proved to be far the most serviceable in all ordinary cases; or with several jars so combined (Fig. 4.) that the whole amount of electricity accumulated in all the jars, can be conducted to the patient so as to be all imparted to him in one single charge, and thus produce one severe shock.

At the present time, the electrical machine in more common use by physicians and scientists is made, not with the glass in the form of a cylinder, but in a plate (Fig. 5.) arranged so as to rotate around the centre of the plate in the same manner as a circular saw does.

Although most works speak of *electricity* as being applied to the cure of disease, it is but seldom now that either of these forms of Electrical machines are used for the purpose of generating and applying it. The

Fig. 5.

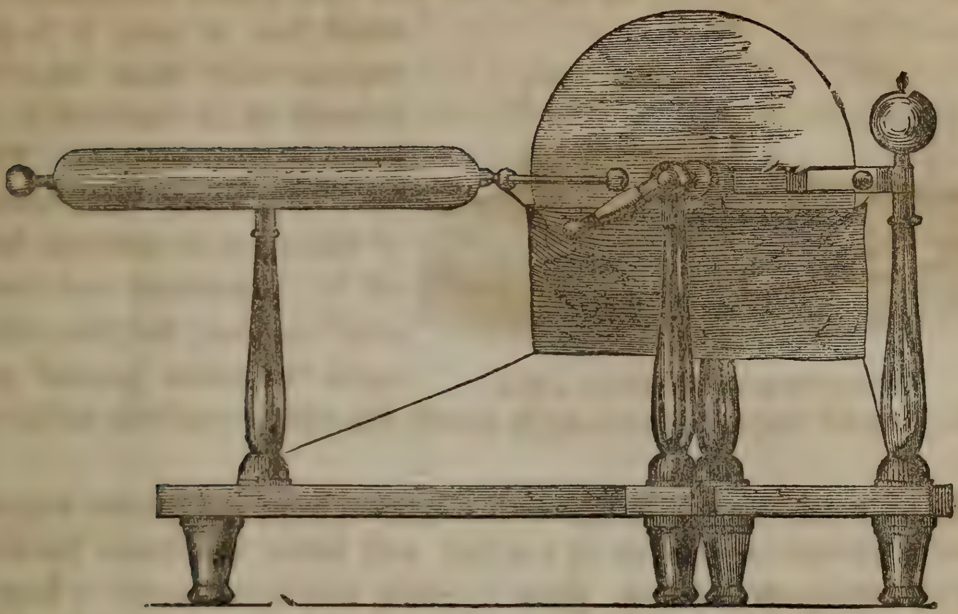
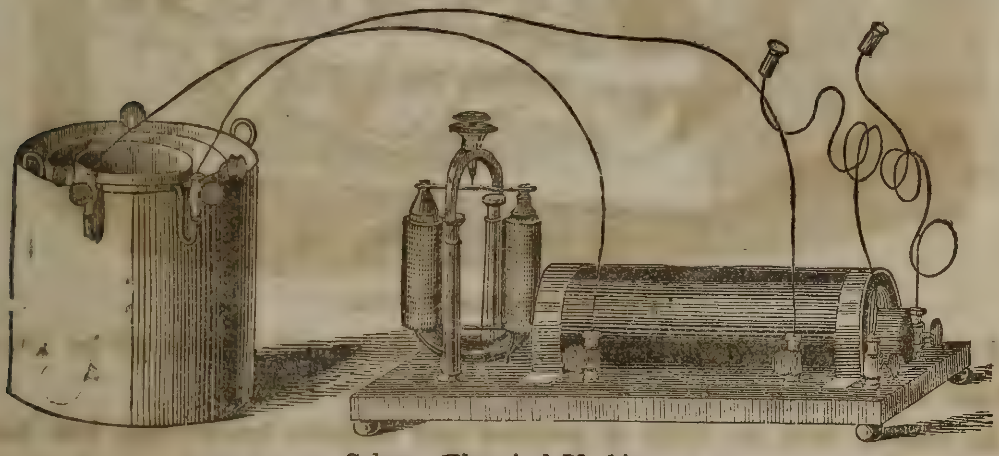


Plate Electrical Machine.

more common method is to have *galvanism* generated by the action of an acid on an oxydizable metal, as zinc, and then that galvanism is carried, by means of conductors, not to the patient, but to an arrangement of metals, so that it shall be changed or *converted* into electricity before it is applied to the patient.

Fig. 6.

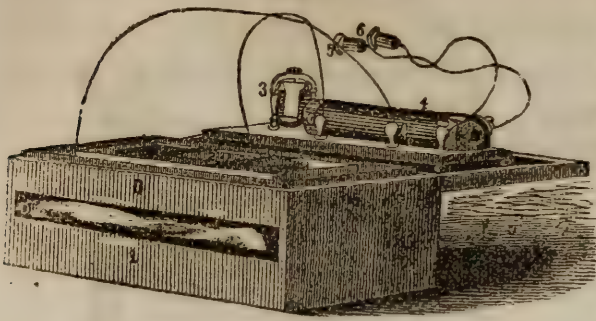


Galvano-Electrical Machine.

Figure 6 is a representation of a form of apparatus that was frequently in use a few years since, and even now is as convenient a form of machine, as any, for the purpose of generation and applying galvano-electricity; but as it is not as portable as some other forms of machines it is undeservedly fallen into disrepute. But some of the most experienced electricians prefer it for general use in their practice.

A more modern, and more portable form of galvano-electrical machine is that shown by figure 7; and as it packs compactly in a small box or case, it is quite popular with those who wish to carry their machine to the home of their patients. There have been many modifications of this form of machine devised by physicians and instrument makers, but they all act upon the same general principle, and all impart electricity in nearly the same condition to the system.

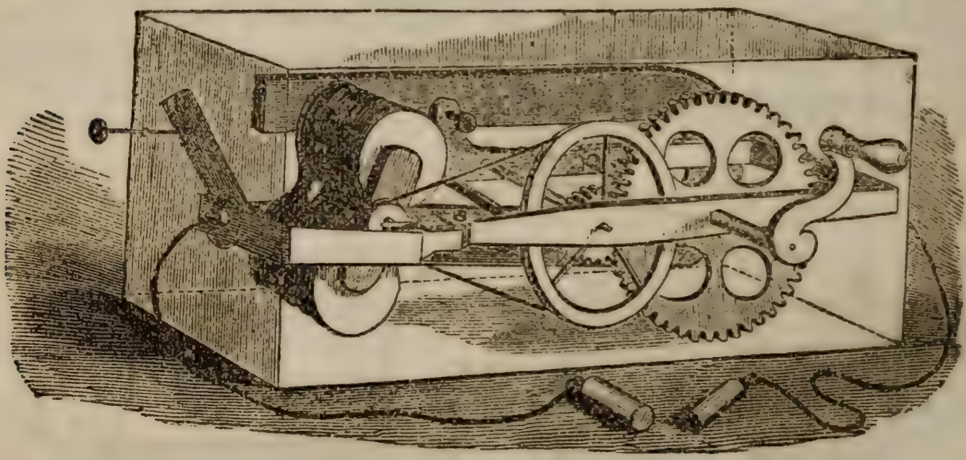
Fig. 7.



Galvano-Electrical Machine in a Box.

As all machines which are made electrical from galvanism require a *fluid* to produce oxydation of a metal, and hence are found inconvenient of transportation from place to place, and troublesome to keep in working order; more recently a variety of *magneto-electrical* machines like that represented by *Figure* 8, have been thrown into the market, and at first were quite popular. But those who have given them a trial, have not generally obtained satisfactory results.

Fig. 8.



Magneto-Electrical Machine.

In simple fact, so little of pointed and definite knowledge has been obtained in regard to the influence of Electricity and its kindred agents upon the system in health and disease; so little is understood of the difference between magnetism, electricity, and galvanism;—and so indistinct have been the directions for their use, even by those who have had considerable experience with them as therapeutic agents, that they are usually resorted to with doubt, and not unfrequently discarded as unsatisfactory.

But already enough knowledge in regard to them has been accumulated to warrant the belief that they are of very great value, and can be applied in the treatment of many forms of disease with as much certainty and science, as attends the use of our most popular and scientific modes of medication; and it is to be hoped that this accumulated knowledge will ere long be collected so as to be furnished to the profession in a desirable and practical form

CANCER OF THE STOMACH.

BY LEWIS E. MILLER, M. D.

Cancer of the stomach is found to be a common disease in some families. It is met with in males and females in nearly equal proportions; and appears generally after the age of thirty years.

The form of cancer in the stomach is usually the *medullary*, and quite seldom do we meet the scirrhus, the alveolar, or epithelial form of the disease in this viscus. It attacks any part of the organ, but more frequently the region of the pylorus, and is very seldom found first in the fundus. As first observed it is of moderate extent, but afterwards attains a large size, even to spreading over the whole of the stomach and attacking adjacent parts.

If its seat is in the pylrous it causes an enlargement of the stomach, while if its seat is on or near the cardiac orifice, or over a large part of the stomach, its cavity is diminished; but wherever situated it produces inflammation of the stomach and hypertrophy of the neighboring parts.

Cancer of the stomach can exist for a considerable time and become quite extensive before it causes its characteristic symptoms to be observed. But frequently there are numerous symptoms of disease, which however are caused only indirectly by the cancer, as dyspepsia, vomiting hæmatamesis, emaciation, and jaundice.

The symptoms caused directly by the cancer are;—pain, but this is often wanting; noticeable enlargement, but this can only be felt under peculiar circumstances; and sometimes vomiting cancerous matter. Other symptoms observable as the disease has progressed are such as are produced the invasion of the stomach and neighboring organs by the cancer, and its affecting the lymphatic glands and the skin, or from perforation of the stomach. On these symptoms we rely for our diagnosis.

In its commencement, cancer of the stomach is not usually painful, or rapid in its progress; but sometimes it is very sudden in its growth. But after it has made considerable progress it affects digestion so much as to produce rapid emaciation with disturbance of sleep, and depression of spirits with general fever, and speedy death. So also, when an obstinate diarrhœa appears in place of the more common constipation, the downward progress is rapid.

The first noticable symptoms of cancer of the stomach, are, difficulty of digestion, even of some years duration, eructations of offensive gas, a feeling of heaviness and fullness of the epigastrium; and later, pressure and pain at the seat of the disease. If the cancer is about the cardiac orifice there will be difficulty of deglutition, lancinating pain, pyrosis, costiveness, often vomiting of a chocolate or coffee-ground appearing mass, with cachexia. Percussion shows cancer of the pylorus by a faint sound and slight resistence at the location of the pylorus, under the border of the liver. The food is not vomited up as quickly as in cancer of the cardiac orifice, and the pain and fullness is a little at the right of the median line and above the umbilicus, presenting often a hard round mass. In the last stages, hectic fever, dropsy, and perforation of the stomach, often precede death. The usual duration of the active stage of the disease is about six months, and very seldom more than a year.

Cancer of the stomach is often the result of improper food and drinks, or the abuse of stimulating condiments, or a continued pressure upon the epigastrium. In Lombardy in Italy, and in upper Suabia, and in particular in the Canton of Zurich, Switzerland, where considerable sour wine and must is drank by the people, and improper food is eaten, and silk-weaving is common and produces a continuous pressure over the epigastrium, this terrible disease appears absolutely epidemical. Mental depression also causes it.

The result of the disease is always fatal. The death may be produced by hemorrhage, by perforation of the stomach, or by the progress of the cancer upon the adjacent organs.

The treatment is palliative. To moderate the disease, allay pain, and prolong life. There have at various times been presented, iodine, calendula, silver, conium, local bleeding, arsenic, mercury, etc., as specifics, in this disease; but they never have cured it, and frequently have proved greatly injurious. A rational diet, beverages containing carbonic acid, belladonna, Prusic acid, morphia, fomentations applied externally, counter-irritants on the abdomen,—are all found useful at times. But the most important of all, is a diet, nourishing, easy of digestion, unirritating, and as much as possible given in a fluid form, and in small quantities at short intervals of time. Strong, nourishing soups, broths, eggs, milk, and a little bread; and as drink, lime-water and milk—but no alcoholic or fermented drinks. In addition, fresh air in moderation, clysters of broth, eggs, chocolate, etc.

Emetics, purgatives, mercurials, carminatives, stimulants, and all forms of tinctures, are positively injurious. Among the best narcotics are pills of the extract of conuim. At first it may be given in two-grain doses, and afterwards slightly increased. If the appetite is nearly gone, the extract of conium should be applied externally as a plaster. Opium sometimes proves beneficial. The extract of belladonna, and infusion of gelseminum is good. In some cases, hyosciamus can be used to advantage.

Where the vomiting is quite frequent, external applications must take the place of internal medication; and injections must be constantly resorted to. Tepid baths, and moderate exercise are indispensible.

NOTES AND OBSERVATIONS.

BY T. C. MILLER M. D.

Achillæ millefolium.—If yarrow is taken to the extent of two or three ounces a day, in infusion, after some days it produces a feeling of roughness in the trachea, a dull headache, throbbing of the temporal arteries, fullness in the ears, heat in the face, a feeling of fullness of blood in the vessels of the eyes, of fullness in the chest. The mouth becomes dry with thirst, a frequent pulse, disturbed sleep, and the urine darker.

Yarrow appears to strengthen the vascular system, and hence is useful in bleeding of the lungs, chronic diarrhœa, inflammation of the kidneys, excessive menstruation, leucorrhœa, ascites, incontinuence of urine, hemorrhoids, vertigo, and other diseases consequent upon debility of the blood vessels.

It was used long since with excellent results in Bright's disease, the patient recovering speedily under the use of yarrow and the chloride of iron.

In indolent, torpid, malignant ulcers it is a good topical application. The etherial oil is useful in chronic indurations and enlargement of the abdominal viscera, and in gleet. In Italy it is used to cure intermittents.

Carbonate of Manganese.—I think Prof. Cleaveland has done the profession good service in calling their attention to the therapeutical value of the preparations of manganese; and will add but a few words. The carbonate of manganese has been esteemed by many entirely inert, and I do not think its action on the economy is yet fully established.

[In my practice I am fully satisfied that it has repeatedly increased the number of *white blood corpuscles;* and many cases of anæmia that did *not* improve under the iron and tonic treatment, commenced to amend rapidly almost at once, when the carbonate of manganese was added.—C.]

Chloride of Manganese.—This is similar to the sulphate in its action. Kapp used it in syphilitic and scorbutic affections of the mouth, throat, and skin, both internally and externally, to the extent of from three up to ten grains a day, in solution. Osborne gavé it in nasal hemorrhage.

Phosphate of Manganese.—This is the mildest of the manganese preparations, but has not been much used.

Sulphate of Manganese.—In addition to its great power to increase the flow of bile, it has been highly recommended by Goolden in chronic torpidity of the liver, and spleen, and in jaundice. Ure and Thompson particularly recommended it as a cholagentic agent, in gout and rheumatism where the liver is affected.

Sulphate of Manganese has been used by Rapp, as an internal remedy in various forms of cutaneous disease. In 1854 I used an ointment of it in spasmodic, half-involuntary movements of the right and left arm; in an induration of walls of the abdomen; in syphilitic buboes after the unavailing trial of iodine; in cancer of the shoulder and hip-joint; in necrosis of the extremities; in spondylarthrocacea; in coxarthrocacca with contraction of the adductor muscles, pain in the knee, etc. In nodes of the glands; and particularly in stiffness of the joints,—I find this ointment to be a treasure.

I prepared the ointment by using one drachm of the sulphate of manganese, to one ounce of lard.

One ounce I found enough to affect the cure in most cases, but sometimes more was required. It should be rubbed in over the part affected, until pustulation is produced.

I was led to use it in 1854 by Prof. J. Hoppe, an eminent practitioner, author, and teacher at Bassel. The conclusions he arrived at are as follows:—

Iodine ointment is valuable, but the sulphate of manganese is often preferable; and hence should take the place of the former. Iodine ointment may be used for the purpose of softening and removing indurations, but manganese is preferrable. Where the mass is already soft, sulphate of copper, made into an ointment in the same manner, is admirable, and to be preferred to either iodine or manganese.

As manganese or iodine ointment, to be efficacious, require considerable friction to cause their absorption, they cannot be used where there is great sensitiveness to pressure. But in hard nodes, or in stiff joints, the manganese ointment will seldom disappoint the practitioner.

Tuberculosis Hepatis.—A tuberculated condition of the liver is not very common—but more frequent among children than adults. The tubercles are small and in scattered groups. The diagnosis is quite difficult.

Iodine that proves useful in tubercular diseases elsewhere, does not here answer our expectations. Frictions of sweet oil, foot-baths, inspisated ox-gall,—light diet, with milk and water for dinner, are better than other treatment.

In all chronic diseases of the liver, of whatever form or name, if mercurials have been much used it is next to impossible to effect a radical cure.

Tuberculosis of the Intestines.—This is usually a *secondary* disease, following enteric fever (*Typhoid fever*), diarrhœa, or dysentery. It is met with in patients of a tuberculous diathesis, or scrofulous ones, and particularly after variola, varioloid, scarlatina, or anomalous gout, if followed by dysentery.

Tuberculosis of the intestines more frequently occurs in the middle and lower half of the illium and in the cœcum, in granulations seated in the follicles and mucous coat. This disease frequently does not manifest itself by any *diagnostic* symptoms. Indigestion, loss of appetite, pain in the abdomen, and a burning sensation at night, with diarrhœa at times appearing for two or three days and being absent the same length of time, with a flaky discharge in which perhaps are streaks of blood or dark colored pus, and of a strong odor, are among the symptoms of the disease.

The condition of the abdomen, the presence of glandular enlargements, or of tubercles elsewhere, the quality of the intestinal discharge, the presence of hectic, may aid, but cannot render absolutely certain the diagnosis.

Treatment promises nothing or but very little towards a radical cure.

Attention to the diet, and such treatment as meets the indications as they arrive is all that can be done.

Perforation of the Stomach.—If we find a patient who has had an extremely severe pain at the pit of the stomach, with a tormenting *depressing* anguish, and fruitless attempt to vomit; with distention of the stomach or a diffused mass of a fluid or semifluid form extending down to or beyond the umbilicus, we may be almost certain that the walls of the stomach have been perforated or ruptured. The accident must prove fatal.

Salicine in Enteric Fever.—I find this agent an admirable one in enteric, sometimes mis-called typhoid-fever. I give it in one or two grain doses four or five times a day. Sometimes ferro-cyanuret of iron combined with it is necessary. Veratrum viride is apt to increase the diarrhœa unless combined with opium, and salicine seems far preferable to quinia to be used in connection with veratrum viride.

VENESECTION IN INFLAMMATION OF THE LUNGS.

BY JOSEPH DEITL, M. D.

[Translated from the German, by Lewis E. Miller, M. D.]

Influence of Venesection on the Nerves.—The sense of weakness and debility of the muscles is marked in pneumonia during the entire continuance of the stage of exudation. When exudation ceases the strength returns rapidly,—often wonderfully so. But bleeding increases the weakness greatly, and particularly when it is repeated and a profuse perspiration follows. The patient not seldom feels so weak as to be almost unable to raise his head or to speak aloud, although in other regards he does not appear greatly influenced by the disease. This debility continues, and but few patients entirely recover from it for several weeks, and perhaps a debility of the muscles may last months, more particularly in children and weakly persons.

Pneumonic patients are usually restless and anxious, and in a state the opposite of stupor. In but very few and grave cases where the patients were not bled was there any apparent tendency to stupor. But when bleeding was resorted to, along with the increased difficulty of breathing and cyanosis, stupor would present itself and continue some days after the other symptoms disappeared, the patient finally rousing himself as from a deep sleep.

In some cases of pneumonia in young and vigorous patients, where the disease was complicated with typhus, furious delirium was present during the process of extravisation. On the sixth day, when exudation had disappeared simultaneously with the dyspnœa and fever, the patients became quiet, and were entirely unconscious of the delirium they had suffered from. When, however, typhus occurred in pneumonic cases where the patients were debilitated and feeble, there was great restlesness; and almost uninterrupted delirium continued after all the other grave symptoms had passed away, and this delirium was quieted only as the patient recovered strength and health.

I speak particularly of those cases, as experience proved that venesection by inducing anæmia, in the otherwise strong, led to all the phenomena described here, as following debility from other causes.

Influence of Venesection on the Complexion.—The ordinary yellowish tinge of the face in pneumonia is always changed to a deeper yellow, or even of a decided icteric hue under the influence of bleeding.

We all have heard of *pneumonia Billosa*, but I do not believe there is a billious pneumonia, and the form of the disease so called, without doubt, is the result of blood-letting.

A cyanotic condition of the skin is quite common in pneumonia in grave cases, even when the disease is not meddled with; but is not omenous of great danger. But when greatly increased by blood-letting, is frequently accompanied with partial paralysis of the heart.

Influence of Venesection on the Physiogomy.—The appearance of the face is the sure indication that exudation is completed. The face looses its expression of deep distress and anxiety, and is composed and serene, even cheerful and happy at an escaped danger. This change always is manifested when the course of the disease is not meddled with; but after venesection is never rapid or complete for many days.

Influence of Venesection on the Appetite—As the patient improves in all other repects he regains his appetite until it becomes natural. But after bleeding it becomes ravenous,—almost *canine.* Usually, however,this devouring hunger does not manifest itself until after one or even two weeks.

Influence of Venesection on the Cough.—In ordinary cases the cough in pneumonia is not in proportion to the extent of the disease. But where the cough is severe, venesection greatly lessened it, and yet it protracted recovery.

Influence of Venesection on the Expectoration.—The greatest practical difference produced by bleeding in pneumonia is on the expectoration. In those cases where bleeding was not resorted to, copious expectoration of bloody frothy sputa was not observed except in the gravest cases;—while all ancient writers, who saw only such cases as had been bled, consider *dry* pneumonia grave and almost uniformly fatal. In the second stage of our patients who were not bled, I observed a thick tenacious sputa, mixed with blood only in feeble or aged persons. With the vigorous the blood disappeared within two days of the completion of the exudation, and the amount raised was quite small; and we found it a favorable indication, if, with the competition of exudation the expectoration ceased entirely.

By venesection, the walls of the capillary vessels of the lungs are weakened, they become relaxed, engorged, and are restored to their normal size very slowly. The excretion is increased, absorption is lessened.

Another change produced by bleeding, especially if repeated, is a discoloration and disintegration of the sputa, proving beyond the possibility of a doubt, that bleeding favors disintegration of the lungs and the formation of pus.

Influence of Venesection on the Urine.—During the stage of exudation there is more uric acid, urophæin, and sulphur, than usual, while the chloride of sodium is almost entirely absent. After exudation ceases, urate of ammonia, and ammoniated phosphate of magnesia appears, giving a yellowish, white, or brick-dust like appearance to the urine, being partly suspended and partly deposited; and the common salt then appears in large quantities.

According to our observations, the cases that pass through the inflammation most favorably, give the least changes in the urine; and where the urine is much affected, it must be from decompositions caused by the gravity of the disease; and venesection greatly aid those decompositions of tissue.

Influence of Venesection on Debility and Emaciation—.The blood is the source of nutrition. Disturbance or loss of blood are the chief causes of emaciation. Through the improper admixture of the elements in the blood, imperfect, or no material is furnished through it for the formation and nutrition of tissues and organs. Many forms of disease are caused by the organ or organs not having the proper nutritive material furnished to it in proper quantities.

In pneumonia, the corpuscles of the blood are diminished in number; and that alone causes a manifest emaciation and often a chlorotic or anæmic condition, but only in a marked degree when there has been a considerable loss of the nutritive or plastic material of the blood either from the severity of the disease or from venesection.

Venesection withdraws directly the nutrient fluid, and also favors decomposition or disintegration of organs and tissues, the elements of which are excreted from the system. It is evident that venesection very greatly aids in producing emaciation and debility, and that pneumonic patients convalesce very slowly after being bled. After venesection, patients uniformly appear weaker and more emaciated than other similar patients who have not been bled. The same is also true in regard to debility. It is shown that very serious debility often follows repeated bleedings, and that such patients recover their strength very slowly, suffering not only from debility of the body but of the *mind* also; showing that venesection has produced alteration and wasting of the substance of the brain as well as of the muscles.

When the patient has not been bled, immediately on the cessation of exudation he feels stronger, recovers rapidly, is cheerful, and is soon able to resume his former occupation. When bleeding has been resorted to, after exudation, the patient feels weak, exhausted, and is long in recovering his former health.

Influence of Venesection on the Proportionate Mortality of Pneumonia.– From the year 1842 to the year 1846, there have been treated in the Hospital 380 patients with acute pneumonia. 85 were treated by venesection, 106 with emetic tartar, and 189 with simple dietetic measures. Of those bled, 68 recovered and 17 died. About one-fifth terminated fatally. The mortality was 20.4 per cent. Of the 106 treated with tartar emetic, 84 recovered, and 22 died. The result was very nearly the same as with those who were bled. The mortality was 20.7 per cent. Of those treated by simple dietetic measures 175 recovered and only 14 died, or only 7.4 in the hundred, about one-third as many as died under the use of the lancet or tartar emetic.

Not only does venesection greatly add to the direct fatality of pneumonia, but it favors various complications, accidents and dangerous and unfortunate sequelæ; as pericarditis, meningitis, phthisis, and in short, chronic disease of all kinds and renders the system peculiarly liable to the invasion of any acute disease to which it may be exposed.

STRICTURE OF THE URETHRA.

BY A. B. JACKSON, M. D.

Stricture of the urethra is an affection that arises from irritation and inflammation excited in a variety of ways. It may follow caustic injections, masturbation, violence produced by the unskilful use of the bougie, sound, or catheter, or by a blow or kick in the perineum, yet far the most common cause is gonorrhœa.

Several varieties or forms of the disease are met. The spasmodic, dilatable, and the impermeable and undilatable,—terms which explain themselves, may exist, and therefore demand attention. The first mentioned is a narrowing of the calibre of the urethra of a transient character, and does not depend, as all the others do, upon an effusion and perhaps organization of lymph in and beneath the walls of the urethral passage.

Spasmodic stricture is paroxysmal in its nature, depending upon an unusual irritability of the urethra, and passes off as mysteriously as it comes on, leaving no constriction nor obstruction in the canal recently affected. *Organic* stricture which embraces all the other forms just mentioned, is more permanent, requiring weeks and even months for its complete removal, the process of cure consisting in the absorption of the abnormal barrier.

Of the callous, undilatable form of stricture which may need a cutting operation, I shall have little to say at this time, confining myself for the present to the soft, dilatable variety, which is far the most common, and the symptoms of which being exceedingly variable, are somewhat perplexing to those unacquainted with urethral difficulties.

As has just been remarked, stricture is a common sequence of gonorrhœa. There is probably nothing peculiar to gonorrhœal inflammation except its high grade and its extent, which predisposes to this accident, for stricture may follow injuries and any undue excitement of the urethra. The mucous lining and subjacent cellular tissue of the female urethra and vagina are similar to the walls of the male urethra, yet stricture seldom affects those passages. We must look, then, to the length and calibre of the canal, for the predisposition.

Diagnosis.—The existence of stricture is to be ascertained by the introduction of a bougie. At the instrument and apothecary shops are kept a variety of bougies with almost any kind of which a physician can explore the urethra. It is, however, with the elastic bougie that the most accurate diagnosis can be made in cases where the strictures are so small and soft as to offer little obstruction to the passage of a metallic catheter or other hard instrument. With this, a morbidly sensitive point can be discovered which would pass unrecognized during the introduction of a rigid instrument. The bougie of moderate size is to be lubricated with glycerine, olive or castor oil, or mucilage, and passed slowly into the urethra, sliding it backwards and forwards near the meatus to ascertain if there is not a tender place just within the fossa navicularis. If none be found, the instrument is to be carried carefully along, at the same time straightening the penis with the left hand to take the folds out of the lining membrane of the urethra; somewhat of a back and forward motion being given to the bougie that no stricture or morbidly sensitive point go undetected. The principal stricture, when any exists, will generally be found between the place where the penis doubles across itself when it is in a flaccid state, and the termination of the bulbous portion of the urethra. In rare cases a stricture may exist in the membranous portion of the urethra; and in a few instances I have discovered a strictured state of a part of the prostatic portion of the urethra. During the introduction of the bougie whether as a means of diagnosis or cure it must be borne in mind that the normal closure of the neck of the bladder will appear much like a stricture. I have known this mistake to be made several times. Physicians of experience probed away at the sphincter vesicæ, wondering why they made no progress in the cure, even questioning the efficiency of a bougie in the treatment of stricture. The distance from the meatus urinarius to the neck of the bladder is from seven to nine inches, and when the bougie reaches the latter point, the patient feels considerable uneasiness attended with a desire to micturate. When it cannot be satisfactorily determined whether a stricture or the neck of the bladder offers the obstruction to the passage of the bougie, a silver catheter may be used, the flow of urine indicating the position of the instrument. By carefully withdrawing the catheter until it leaves the bladder, the contraction of the sphincter vesicæ will give an impulse to the instrument that may be felt, from which it may be determined where the point of the catheter rests. Then by making a mark on the catheter where it protrudes from the meatus, withdrawing the instrument from the urethra, the distance from the end of the penis to the neck of the bladder may be observed, and marked off on a bougie to be employed to explore the urethral canal. Besides, in some cases it may be necessary for the patient to use bougies in the treatment of his difficulties, and, that he may employ them skilfully, doing himself no harm by irritating the neck of the bladder, he should have marks put upon the instruments to indicate how far they are to be introduced.

It is a valuable accomplishment to understand the majority of the symptoms which attend stricture of the urethra. These are so marked in most cases that the exploration with the bougie only confirms what is already suspected. In what is ordinarily termed *gleet*, a stricture is the cause of the discharge in eight cases out of ten. All cases of stricture, however, are not attended with a discharge. Yet there is more or less moisture at the meatus and agglutination of its lips. Erections may be accompanied with painful sensations which resemble a slight chordee, especially when the stricture is recent. There is often discovered a morbidly sensitive point while the penis is erect, if the finger be pressed along the course of the urethra in the perineum. It is quite common that some irritability of the bladder exists, causing the patient to urinate, often calling him up once or twice at night to void urine. The irritability may extend to the kidneys, producing tenderness in the back and pains in the hips and legs. Hemorrhoids, prolapsion of the bowel, and diminished power to void the fæces may be symptoms of stricture of the urethra. A sense of heaviness in the perineum is a source of suffering, as well as a similar sensation in the testes. Frequently an enlargement of the globus major of the epididymis of the right testis, produces annoyance and excites alarm, especially when the affection is attended with pain. Swelling of the testicle and neuralgia of the organ are often due to stricture of the urethra. Paralysis of the lower extremities, partial or complete, sometimes follows stricture. But among the most marked symptoms are derangements of the urinating power. The stream will generally be distorted. It may be forked, spiral or dribbling; or be interrupted as if obstructed by a spasmodic contraction of some part of the urethra. The patient is unable to start the stream as promptly as usual, and to throw off with jerking efforts the last drops of urine. A few minutes after urination, a wet spot of some size will be observed on that part of the shirt which envelopes the end of the penis. This wetting of the linen is effected by the gradual leaking away of a few drops of urine, which were retained for a time in the bag-like dilatation behind the stricture.

Incontinence of urine is a rare symptom of ordinary soft stricture. Involuntary emissions of semen, and a diminution of erectile and sexual power are frequent attendants. Depression of spirits always waits upon the disease.

Over excitement, over exertion, exposure, and excesses are sure to aggravate the difficulty. Promiscuous sexual intercourse never fails to do harm, especially when a female is met who is uncleanly, or is in some way incompatible. Intercourse in the ordinary marital way generally does no mischief. There are numerous disagreeable sensations attending stricture, such as itching of the meatus, and an itching sensation extending along the urethra the whole length of the penis; twinging pains, and fluttering and pulsating sensations in some parts, to enumerate all of which would be tedious. Already too much space has been devoted to the enumeration of the symptoms of stricture, but I have so often noticed the most of those mentioned and known them to be mistaken for symptoms of other difficulties and diseases, that I felt interested in calling attention to them. To show the importance of noting the symptoms of stricture, I will notice briefly a single case that came under my observation, A gentleman of my acquaintance recently told me he had paid out six hundred dollars to various quacks and regular doctors, for the treatment of a difficulty he had suffered with for two years. He had been treated for gravel, gleet, chronic inflammation of the kidneys, enlargement of the prostate, neuralgia of the genitals; and when I first had conversation with him upon the subject he was about to send ten dollars and a vial of his urine to a Uroscopist or "piss doctor," who made great pretensions in a neighboring city. The patient had noticed that his urine upon standing a few hours, deposited a muco-purulent looking sediment. There was a cloudiness of the urine soon after it was voided. This circumstance filled him with alarm, and caused him to seek relief at the hands of the pretender above referred to. Upon being assured that his whole trouble depended upon stricture of the urethra, he avowed his intention of abandoning the doctors altogether. There are scores of young men in every large city, who have been told repeatedly by their medical advisers that they never would get rid of their genito-urinary difficulties until they caught clap again. Too often do they take the malady the second, third, fourth, and perhaps, tenth time, but obtain no benefit. Physicians who give such advice deserve to be publicly exposed in their quackery. As a case is passed round from doctor to doctor each is apt to say that the difficulty was owing to improper treatment; that gonorrhœa left to itself will run itself out, leaving no bad effects behind. Now, every experienced and observing physician knows that the most approved treatment fails to cure in one or two weeks, *every* case of gonorrhœa; also, that clap left to itself is sure to be followed sooner or later with stricture of the urethra.

The effectual method of removing all these difficulties, professional and pathological, is to understand the symptoms of the disease, the means of exploring the urethra for the purpose of establishing a correct diagnosis, and the treatment.

Treatment.—The only cure for soft stricture is the repeated use of bougies. They are to be passed every day until all traces of the difficulty are overcome. Instruments of various materials have been invented but none are so good as what bear the name of the English and French elastic bougies. A variety of sizes should be at command, as the passage is so narrow at the strictured point, that one the size of a small catheter will not enter it. Others of small calibre must then be tried until there is not much difficulty in carrying the instrument through. It must be borne in mind, however, in the passage of a bougie, that the urethra where the stricture exists, contracts as soon as an instrument is attempted to be introduced. This temporary contraction can usually be overcome by pressing gradually but persistently upon the bougie. In such cases the French instrument is not stiff enough to maintain the force in a direct line, but it will bend, allowing the end to pass upon one side of the stricture, endangering the integrity of the urethral walls. Bougies with conical points, made with the supposition that a cure depended upon mere dilatation, have been introduced to the notice of the profession, but as a general thing they are totally unfit for use. As much may be said of all metallic instruments, whether ductile or not. The bougie does not affect the cure so much by dilatation, as by the absorption its presence and pressure excite. Unless this principle be kept in view in the treatment of stricture the efforts of the physician will not be successful. Lastly, a surgical cutler introduced to my notice an instrument which resembles a uterine sound, being split into halves, and having an apparatus in the external end for forcibly separating the two pieces when it had been passed through the stricture. I remarked that such a machine would do better for *tearing* strictures than for curing them.

Before introduction the bougie should be well lubricated with oil or some emulsion. It is then to be passed carefully along the urethra until it passes the last stricture, which is to be known by the kind of manipulation advised in making out the diagnosis. The instrument should generally be allowed to remain three or four minutes in the urethra, and in some cases where its presence causes no irritation it may be left in for half an hour. Particularly must it be borne in mind that the first few times a bougie is introduced into a patient, the instrument is likely, especially in sensitive individuals, to excite symptoms which seem to the patient to be an aggravation of the difficulty. And, in fact, a large bougie, roughly manipulated, will do mischief. I have many times known a case aggravated by the use of too large a bougie, and an awkward introduction of it. Until the urethra becomes accustomed to the presence of such instruments they are to be employed with some caution. To lubricate and medicate the bougie, I sometimes employ glycerine, in which is dissolved a small quantity of the extract of belladonna. Whether the last mentioned, agent really allays any irritation, relaxes, the constrained muscular fibres of the urethra, and does other good I am unable to assert positively. Certain it is, that I have used the agent as above directed, and believed its effects were serviceable. A strong solution of morphia injected into the urethra, sometimes is a powerful adjuvant in the curative process.

The use of bougies for two or three months will usually affect a permanent cure. Unless the cure be completed before the treatment is abandoned the disease is liable to recur again sometime subsequently. When the cure is nearly affected the bougie need not be passed so often, the treatment being gradually abandoned.

No wax nor other brittle bougie should be used, lest a fragment get lodged in the urethra, or pass back into the bladder.

When there is any pain or heaviness in the testes, the scrotum should be carried in a suspensary bandage. A knot or enlargement of the epididymis caused by a stricture of the urethra, will gradually subside under the influence of the bougie treatment. Nocturnal emissions will abate; vigorous erections will return; and the patient will be no longer annoyed with rising at night to void urine. If there be much pain in the back the sensitive region should be covered with an anodyne plaster. When there is much pain or uneasiness in the testicle or penis, the skin covering the suffering spot may be wet several times a day with the following anodyne pomade:

℞. Glycerine, f℥j.
Hydrocyanic acid, fʒj,
Aconitina, grs. ij. M.

A plaster of the extract of belladonna, wetted and laid upon the testicle and perineum exerts a quieting influence. The passage of a bougie often destroys a neuralgia or pain in the penis. Any one having a suggestive mind, with a fair knowledge of therapeutics and surgical manipulation, can readily overcome almost every complication that may follow gonorrhœa. A patient came to me some years ago, complaining that he had been troubled for a long time with a slight discharge from the penis, and a soreness of the urethra at a point about three quarters of an inch from the meatus. He said he had been doctored for five months for the relief of the difficulty, no physician he had yet consulted being able to cure him. Upon inquiry I ascertained that all his medical advisers had recommended injections of some kind. I asked to see the syringe; which upon examination the instrument being a glass one, revealed a slight break in the nozzle. "This," said I, "is the cause of your prolonged suffering." If the student and junior practitioner trust, in the treatment of venereal disease, to a few recipes they have received from their preceptor or professor, to the neglect of a study of the pathology of each case that comes under their observation, as well as that of disease in general, they will meet with many perplexing disappointments.

EDITORIAL DEPARTMENT.

THE COLLEGE JOURNAL OF MEDICAL SCIENCE.

In accordance with former usage, it is proper at the end of the year to call the attention of the readers of the College Journal to the manner in which it has fulfilled its mission during the twelve months now drawing to a close.

During the two years preceding the present it had been under the same management as now, and the Publisher had been so well pleased with its character and the reception it had met with from the profession, that he saw no good reason for any material change except so far as his increased facilities and experience enabled him to improve and perfect his former plan and aim. And he is gratified with the assurance that his ideas and endeavors have met the approbation of all without a single exception, who have favored him with their opinion on this subject.

The plan of furnishing the readers of the College Journal with matter *entirely original*, although apparently quite unsatisfactory to the publishers of one or two other medical periodicals, has been satisfactory to us, and we are enabled to finish the present volume as the former one, containing, as will be seen by its "List of Contributors" a series of eminently practical articles from the pens of a very large number of writers, some of whom are favorably known as medical authors, and all of whom have furnished material of far more than ordinary interest and value to the active practitioner.

The Index, indicates an amount of matter,—and nearly all of an eminently practical nature,—even greater than the College Journal for the year previous contained; and last year its contents were beyond comparison more full and varied and valuable than the contents of any other medical publication of this country, and so far as we have been able to learn, of the entire world. But we are willing to have the present volume compared even with the past ones, and are satisfied that we have furnished our subscribers not only *with the cheapest, but also with the best* medical periodical ever published.

In addition to the more elaborate articles published as "Original Contributions" occupying about two-thirds of each number of the Journal, we have freely *condensed* the longer articles of other medical publications, presenting to our readers "Abstracts" of them, and thus furnish the more important points divested with such extraneous matters as, however desirable in an article for a scientific periodical, were of comparatively minor *practical* value.

We have made free use of Wood-cuts, not so much for the purpose of making a "*splendid*" Journal, as to illustrate such points in the articles published as could better be shown to the eye, than made comprehensive to the mind by long descriptions. This feature has already been admitted as a necessity in Books, and we think will soon become far more common than at present in medical and other scientific periodicals; as in many instances, an engraving will teach far more accurately and completely, than the most elaborate letter-press description.

Our "Book Notices," have of necessity been brief; but we have endeavored to present a clear though concise idea of the character and scope of all new works as they have been issued; and we are sure that neither publishers nor readers will accuse us of intentional partiality or favor. In the execution of our self-imposed task of presenting our readers with Notices of New Books, we have often been obliged, for want of space, to give our own opinion, rather than the evidence on which that opinion has been founded; but have never expressed that opinion hastily, or without due examination and reflection. And, if any of our readers have not given special attention to those notices as they have appeared from time to time, we ask them, as a favor to themselves and to the publishers, and a duty they owe to their own profession, to do so at their earliest convenience. It is quite possible that thus their attention will be called to some matters as yet overlooked, and they led to purchase some books necessary to them as scientific practitioners of the healing art.

We have endeavored to furnish our subscribers with the volume complete; but if any numbers of the Journal have failed to reach them, or have been lost or misliad, we will be pleased to supply such missing numbers, gratuitously, on application. And to enable us to do so, we hope that all extra numbers of the Journal, for any year, or those not needed, will be returned, that they may do the most good possible.

Address, Dr. C. H. Cleaveland, 139 Seventh St., Cincinnati, O.

THE PROMISE.—THE FULFILMENT.

The Promise:—One year since, a Medical Journal published in the city of Cincinnati, announced that arrangements had been "effected for re-modeling and enlarging" it. The editors said:—"We shall present a Medical Journal, on the first day of January, that will be in *every respect superior to any medical journal published in America*, no *odds from what source it may come.* * * * * In mechanical appearance, the Journal is intended to *defy criticism*, as the publishers are determined to spare no pains or expense as regards either paper, composition, press-work, or binding. * * * * In it will be found matter emenating from all the Schools of Europe, from time to time, together with a fearless, *manly*, and undisguised expression of medical opinion upon any and all subjects connected with the healing art. * *

"Each number of the Journal will contain *a splendid lithographic plate*, together with such wood illustrations as may be needed from time to time, for illustration. It will contain *Sixty-four pages* monthly, making, in the year, a volume of 768 pages—*a complete medical mirror for the year* 1859." It should be remembered that the Journal in which these promises were published contained *Forty-eight* pages to each of its twelve monthly numbers, and that each page, by printers measure, contained 2584 *ems*, or 124,032 *ems* to a number of the Journal—or 1,488,324 *ems* to the twelve numbers of forty-eight pages each.

THE FULFILMENT.—In January, the Journal appeared, re-modeled, *improved*, (?) *beautifully* illustrated with a lithographic representation of a "*Eucephaloid Tumer*" and *Sixty-three* pages, "*enlarged*" (?) so as to contain by printer's measure, not 2584 *ems*, but 1566 *ems*, or to the sixty-three pages, 98,658 *ems*, in place of 124,032 *ems* contained in the Journal the year previous, and before it was *enlarged*.

The Journal for February contained *no* splendid lithograph, and no "illustrations to illustrate it," and was *enlarged* down to *fifty-four* pages, containing 83,564 *ems*, in place of 124,032, contained in the number of the year previous.

The numbers for March, April, May, June, and July, each contained no "splendid lithographic plate" which was to adorn each number of this splendid Journal that "defies criticism." But in the Journal for August, a slight change of character appeared. It is true, there were no splendid lithographic plates or other "illustrations to illustrate" it, but it contained sixteen pages of an extract from a work well-known to its readers, seven pages of *talk* by a recent graduate, nine pages of the Announcement for the next Course of Lectures, two pages from the Preface of a recent work on Surgery, and the remainder filled up with matter *not* "emenating from all the Schools in Europe."

Neither the September nor the October numbers of the Journal have any splendid lithographic plates or wood illustrations, but that for September does contain sixteen more pages of "Original Communications" made up of continued copying from the work on Practice already referred to. The Journal for November has not yet made its appearance, but if that and the one for December, follow in the footsteps of their illustrious predecessors, the volume will be completed with 63 pages for No. 1, 54 for No. 2, 64 for No. 3, and 53 pages for each of the remaining numbers, making in all 658 pages for the volume, instead of 768 named in the promise. Each of these pages contains, as has been shown, 1566 *ems*. according to printer's measure, and the entire volume will therefore contain 1,030,428 ems of reading matter in place of 1,488,384 contained in the same Journal of the year previous, a *downward* enlargement of 457,856 ems, or nearly one half the amount of the present volume.

A glance at the pages of this Journal, which was to be *superior to any other in America*, is sufficient to convince its subscribers that it *does not contain one of the splendid lithographic plates* that were to adorn each number—and but a single abortive attempt to fulfil that promise;—and that the splendid *wood illustrations* that were to profusely illustrate it are absent; while a careful estimate of the *amount* of matter it contains, (of the *quality* of that matter it is not necessary to speak) instead of being greater than formerly, will show that it has actually been diminished by 457,856 ems, or equal to near 300 pages of the present size.

We call the attention of our readers to this matter at the present time, because we have been told that another change is proposed in that medical (?) Journal for the coming year; and to give them an opportunity of judging how much dependance should be placed in promises emenating from that source; or indeed, upon any statements made, upon any subject, by the conductors of, and those connected with that Journal.

MEDICAL PERIODICALS.

Every practitioner of Medicine needs to keep pace with the progress of the science as much as the tailor or the dress-maker needs to keep pace with the changing fashions in dress, or they will become *old-fashioned*, and behind the advance of the age. It is said that old truths are as valuable as new ones, and the saying may be correct, and is true so far as it refers to the eternal truths of the universe. But many things heretofore supposed to be truths in science, are already found to be errors; and the investigations of scientific men are daily correcting ancient errors, as well as bringing new truths to light, and discovering new uses for old facts in science.

The progress made at the present time in the various branches of the great science of Medicine is as great and important as the progress in the march of mind in any other direction. The records of that progress are first made in the Periodicals devoted to medicine, and he who neglects to search those records, must inevitably fall in the rear of the active, industrious members of the profession; and to enable the readers of the College Journal to select such periodicals as shall best subserve their interests we make a brief reference to a few of various scopes and designs. But in addition to those named, there are near fifty others, published in different sections of the country, not one of which if carefully read, but will impart information of far more value than the subscription price.

The Half-Yearly Abstract of Medical Science, an English periodical of near 700 pages to the volume, is republished by Lindsay and Blakiston of Philadelphia, at $2.00 a year in advance. It is probably the cheapest and best publication in the country for the active physician.

Braithwaite's Retrospect of Practical Medicine and Surgery, is another half-yearly English publication, of size and character quite similar to the Abstract, and republished at the same price ($2.00 a year) by Wm. A. Townsend, of New York. It contains a fuller and more complete retrospect of *Surgery* than is contained in Rankin's Abstract.

The British and Foreign Medico-Chirurgical Review, a Quarterly of nearly 900 pages a year, is republished at New York, by S. S. and W. Wood, the well known Medical Book Publishers of that city, at $3.00 a year. A considerable share of its pages are devoted to the review of new medical books, mainly European, and it frequently contain most that is of practical value in the books thus reviewed. Hence, to the practising physician, it is nearly equivalent to the addition of many new European books to his library. It also contains many original and selected articles of value.

The London Lancet, is republished each month in New York, at $5.00 a year. The annual volume contains over 1000 large double column pages. It is conceded to be the leading Medical periodical of the world. Many of the Lectures of the best London physicians and surgeons are published in the Lancet.

The American Journal of Medical Science, is published quarterly, at Philadelphia at $5.00 a year. It takes the lead of American medical periodicals. Many of its articles are quite lengthy and valuable.

The North American Medico-Chirurgical Review published at Philadelphia once in two months at $5.00 a year, contains many valuable papers.

The American Journal of Pharmacy, published at Philadelphia once in two months at $3.00 a year, is a work of decided value and utility to the physician.

The Charleston Medical Journal and Review, published at Charleston S. C. once in two months at $4.00 a year, is a very valuable publication.

The American Journal of Insanity, published quarterly at Utica, New York, at $2.50 a year, is a remarkably valuable publication; devoted, as its name indicates to psychological medicine.

The Dental Register of the West, published at Cincinnati, monthly, at $3.00, is of deep value to the physician.

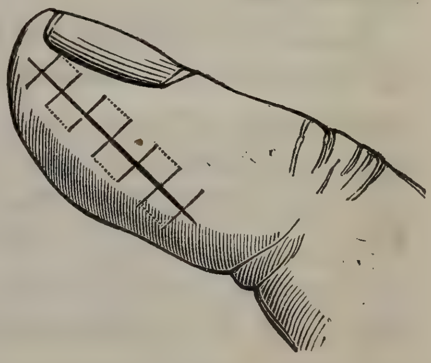
The Boston Medical and Surgical Journal, weekly, at $3.00 a year, has sustained an increasing reputation for science and utility.

The New York Medical Press, published weekly, at $3.00 a year, is fast gaining favor with the medical profession.

But we would advise each physician to be sure that he constantly takes the medical periodical published nearest the field of his professional labors, *and that he contribute to it the results of his observations and experience.*

STEARNS' CONTINUED SUTURE.

Some time since Dr. J. H. Stearns, of Washington, D. C. sent us a description and drawing for a new form of Continued Suture. As the drawing was on the same sheet with his manuscript description of it, we sent the article to our engraver, who has furnished us with the accompanying engraving, but *has lost Dr. Stearns' description of it*, and hence we are constrained to describe it in our own words.



As will be seen by the engraving, *one* needle, armed with a long thread of silk, is to be passed through the part to be ligated, at one end of the solution of continuity, at right-angles with the cut or rupture of the parts, each lip of the wound to be penetrated by the needle. After the ligature is drawn tense, and the sides of the wound brought in co-aptation, the needle is again made to pass through both lips of the wound, a little way from, and paralel to, the track of the first stitch; but of course the needle traverses the wound in a direction opposite to that taken in making the first stitch.

The ligature is again to be drawn tense, and another part of the wound is closed. This operation is to be repeated, the needle carried through both lips of the wound, at right-angles with its direction, first one way, and then the other, until a sufficient number of stitches have been taken to insure co-aptation of the two sides of the wound. Then the ligature may be withdrawn from the needle, and the two ends of it tied together to prevent any slipping or separations of the lips of the wound.

The engraving conveys a clear idea of the manner in which th is continued suture is applied; and the silk as it passes from one stitch to another, tends to prevent puckering the skin, or any undue tenison upon one point, much in the same way as the quill does in the application of the quilled suture.

THE UTILITY OF THE MICROSCOPE TO THE PHYSICIAN.

No one who has through a dfficulty of vision caused by advanced age, or defect of the eyes, suffered in his eye-sight and used spectacles, can for a moment fail to periceve the very great convenience, and in many instances, the absolute necessity of *spectacles* to enable such unfortunate persons to read ordinary printed matter and derive advantage from the ideas thus presented.

But there are many matters, and those of very great importance to the physician, which are too minute to be distinctly examined even by the aid of the spectacles, and hence the utility of such an arrangement of lenses as enables us to examine such structures carefully, and make ourselves as familiar with their appearance and characteristics as we are with those things which we readily perceive with our unassisted eyes.

Hassall's great work on Microscopical Anatomy has now been before the profession in America some eight years, and has, without any doubt, given a more distinct and accurate idea of minute structures than could have been obtained in a lifetime of reading. Very much that Prof. Peaslee has given the profession in his very valuable work on Human Histology, was derived from Microscopical investigations extending beyond the reach of unassisted vision. Prof. Goadby in his Text Book of Vegetable and Animal Physiology has shown us that he constantly availed himself of the aid of this magic instrument, and most faithfully and happily has he embodied the discoveries he made and the results of his labors in his admirable work. Dalton, Todd, Virchou and all modern investigators into the workings of the human economy in health and in disease, have considered the microscope, to enable them to investigate *minute* things, as important as are the eyes to perceive those within the scope of unaided vision.

But while the fact that the microscope is thus useful to the physiologist, and pathologist, has been clearly perceived and readily admitted, its utility to those engaged in active practice *as an aid in diagnosis*, has not always commanded the attention of the profession. And even where it has been understood, the expense attendant on the purchase of instruments and the large number of books requisite for an understanding of its various uses, and the time required to become a familiar and ready manipulator, has heretofore greatly restricted the general introduction of the instrument into physician's offices.

As the demand for microscopes and microscopical works increased, the cost of them diminished, until now they are to be had at rates so low that the price of a good watch will procure an instrument adapted to the physician's use, and the books necessary to accompany it.

The advantages to be derived from a microscope in the practice of medicine are of immense magnitude, and more numerous than can be even enumerated in a single article, but a brief reference to a few of them may be of interest, while the books devoted to this subject must be referred to for a farther elucidation of the matter.

The skin is liable to be infested with a great variety of vegetable, and a few animal parasites that are conveyed from one person to another, or from one locality to another on the same person, and the *diseases* which they cause must be transmitted also. Some of these parasites enter the folicles, or folds, or wrinkles of the skin, and thus become the essential cause of the disease, and, if located on the scalp, producing death of the hair, and baldness. The *Trichophyton tonsaurans*, often causes a death of the hair and disease of the scalp on the centre of the head. The *Microsporon auouini*, *M. Mentagrophytes*, and *M. furfur*, are similar to the parasite past named, but require different treatment.

Nearly every physician is familiar with the ordinary appearance produced by the various Epiphytes, Sarcoptes, and other common animal parasites of the human skin, but do not appear to be aware of the many varieties of epizoles that the microscope brings to light as inhabiting wounds and moist places of the skin, and whose presence tends to perpetuate disease.

Not to the surface alone does the pathological microscopist apply the magnifying power of his instrument. The blood is searched to discover if it has either a deficiency or excess of its normal elements, or if there be present any foreign hurtful elements. Only of late has the microscopical examination of the blood seemed to lead to any valuable or reliable results; but the recent investigations of Virchou, Vogel, Bennet, Robin, and others, have done much to establish a reliable pathology of the blood, and the microscope has proved a constant and valuable aid in their investigations.

The various evacuations have been submitted to careful and oft-repeated microscopical examinations, until it is now found that many of the more important changes in the system undergoes in disease can be determined by a microscopical examination of the evacuations, than by any other known methods.

In the *mouth*, it has been determined that the so-called coating of the tongue is the softened and macerated pavement epithelium, perhaps mixed with some coagulated mucous, and that the brown tint in typhus is from the blood which oozes out of the fissures of the dried mucous membrane; and that the aphthæ is caused by a fungus growing from the mucous membrane. The sputa from the lungs may contain pus, exudation, fragments of the mucous membrane, blood, red flakes minutely granulated, tuberculous matter, or gangrenous products.

The stomach, the intestines, the spleen, the pancreas, the liver, the kidneys, and the other organs, in health and in disease, throw off excretions, normal, or abnormal, each of which should be examined carefully and repeatedly, until the physician is as familiar with their microscopical characteristics as he is with those presented to the naked eye; and then he will distinctly perceive, that as the ordinary glass aids in reading the type of the book or periodical, so does the lens of the microscope aid in reading those matters printed in unerring type within the human body, but which escape our ordinary unassisted vision.

BOOK NOTICES.

Gustaf Von Duben's Treatise on Microscopical Diagnosis. With 71 Engravings. Translated with additions. By Prof. Lewis Bauer, M. D., etc. New York: John Wiley, 1859.

This work has acquired a great reputation in Germany for practical utility, where it was introduced by Dr. Tutschek, who materially improved it by the additions he made to the original Sweedish edition. Prof. Bauer has been greatly assisted in making his translation from the German edition clear and comprehensible by engravings executed by Mr. Thomas Cuzner of New York.

It is an admirable little manual, and *should* become as popular here as it is in Europe. As a work on the *Microscope*, or an introduction to a knowledge of Microscopy, however, it is not equal to Beale's work recently noticed by us, and almost infinitely inferior to the Microscopist's Companion published in this City, but it is just what its title purports, a *Treatise on Microscopical Diagnosis*, and a most admirable one.

Manual of Public Libraries, Institutions, and Societies in the United States, and British Provinces of North America. By William J. Rhees, Chief Clerk of the Smithsonian Institution. Philadelphia: J. B. Lippincott and Co., 1859.

The Title of this valuable work clearly indicates its aim and character. It is an admirable work, and will become an indispensible companion to the Librarian and those engaged in bibliothical investigations.

The position of Mr. Rhees, as Clerk at the Smithsonian Institution, has given him control of information and furnished him with facilities for acquiring additional knowledge, which has enabled him to make his Manual far more full, complete, and perfect than any work of the kind heretofore published. Even the smaller public libraries and societies have not escaped the research of this indefatigable compiler.

Lectures on Surgical Pathology, delivered at the Royal College of Surgeons of England. By James Paget, F. R. S., etc. Second American Edition. Hypertrophy; Atrophy; Repair; Inflammation; Mortification; Specific Diseases; and Tumors. Philadelphia: Lindsay and Blakiston, 1860. Through Robert Clark & Co.

The profession are well acquainted with these lectures, which were delivered during the years from 1847 to 1852, as the First Edition has had a deservedly extensive sale in this country as well as in Great Britain, and no one has perused it but to admire the vast amount of scientific and practical information it presents. This edition will be hailed with pleasure by hosts of old and new friends.

Observations on the Pathology of Croup; With Remarks on its Treatment by Topical Medications. By Horace Green, M. D., etc. etc. New York, John Wiley, 1859.

Some twelve years since Prof. Horace Green published a work on Diseases of the Air-Passages in which he advocated the application of therapeutical agents directly to the larynx and trachea in diseases of those parts. In less than two years, he published the first Edition of the present volume, in which he elaborated his ideas of the pathology of Croup and his then novel ideas of its treatment by means of the local application of a solution of nitrate of silver, of the strength of "from two to four scruples of the salt to an ounce of water," to the parts affected.

The treatment then recommended has been tested in Europe and America, and is again put forth, with ten years additional experience and with increased confidence; and although we have not become a convert to the opinions advanced by the Author, we do feel sure that good must come from the continued investigation the republication of this volume calls for.

Annual Report of the Board of Regents of the Smithsonian Institution, showing the operations, expenditures, and condition of the Institution for the year 1858.

In the Appendix of this volume, are reports of Lectures on Astronomy, by Prof. A. Cassell, of Brown University; a Memoir of Priestly; Instructions in reference to collecting Nests and Eggs of North American Birds; for collecting Insects; a valuable Report on Atmospheric Electricity; on recent progress in physics; and other papers of interest, making a work of value to the scientist, but of no special utility to the physician.

Importance of the Study of Legal Medicine; A Lecture Introductory to the Course on Medical Jurisprudence. at the New York Medical College. By JAMES WYNNE M. D. H. Bailliere, New York: 1859.

This is a fair Lecture in regard to a branch of medical education often too much neglected by the Colleges, and seldom pursued by the practitioner in after life unless he is called into court as the defendant to a suit for mal-practice.

On Recto-Vescical Lithotomy; With the report of a case in which this method was successfully employed. By Prof. LOUIS BAUER M. D From the Author.

This is an interesting monograph; but will prove to but few that the operation for stone should usually be by means of a cut through the rectum into the bladder.

The New American Cyclopædia. A Dictionary of Popular Knowledge. Edited by GEORGE RIPLEY and CHARLES A. DANA, Volume VII. Edward Fueros, New York: D. Appleton and Co.

This great work, which we have frequently noticed, continues to advance steadily to its completion; and each volume excells its predecessors in interest and value. There are about two thousand separate articles in this volume, some of which are of deep interest to the medical profession. We are prepared to again endorse what has been said of the value of this Cyclopædia, and earnestly advise our friends to become possessed of this great national work.

EDITORIAL ABSTRACTS.

Forceps vs. Ergot.—In a paper on the comparative value of the forceps and ergot, Dr. Barker concludes that ergot should be used only in cases of inverted uteri, in the last stage of labor at a time when the labor may be expected to be terminated within an hour, in the first stage of labor where there is a partial presentation of the placenta, and in post mortem hemorrhage in plethoric patients with flushed skin, thirst, and a bounding pulse. When the skin is cold, the pulse gone, lips pale, and the countenance sunken, opium and brandy and not ergot are indicated. Ergot may also be given in retention of urine after labor.

In regard to the use of the forceps, Dr. Barker says:—"I must state my conviction, that the more enlarged is the clinical experience and the more acute the observation, the more rarely will ergot be used before delivery; and furthermore, that the *fear of delay in labor, will be greater than the apprehension from the use of forceps.*"

Tris-Nitrate of Bismuth is recommended by Dr. Gaby, to be applied in powder, locally to the parts affected, in simple vulvitis, in vaginal leucorrhœa, in other forms of whites, applied to the vulva, vagina, and urethra.

Phlegmasia Dolens.—Dr. Moreau recommends the elastic stockings as far preferable to, and more manageable than the roller.

Fibrine.—Prof. Virchou, the eminent pathologist of Berlin in his recent work on Pathology, denies that fibrine is ever transuded from the blood-vessels into the organs in which it is found; but is *produced by the organs* when inflamed, and thence passes into the blood, through the lymphatics on its way to be excreted from the system. He also maintains that only certain organs can produce fibrine, and that it is never produced in inflammation of the brain.

Sulphate of Zinc in Chorea.—Mr. W. H. Stone reports his experience in treating fifty-four cases of chorea, admitted to the St. Thomas'

Hospital during the year 1858. Of these cases fifty were put under treatment as follows:—Sixteen had sulphate of zinc; twenty, arsenite of potassa; and fourteen, some preparation of iron. The other four had other treatment. Of the sixteen who took zinc, five were males and eleven females. Sulphate of zinc alone was given in eight cases, of whom five were cured and three improved. It was given in increasing doses, beginning with one or two grains. Six grains was the largest doses given to these patients, but as high as twenty grains at a dose have been given, and caused no vomiting.

The shortest course of treatment was twenty-four days, and the longest, fifty-six; the average was twenty-nine days. Those cases treated with iron seemed to prove that iron is more *certain* to cure epilepsy than zinc.

Menstruation During Gestation.—Some have supposed menstruation during gestation very uncommon and indicative of a diseased condition, but no proof has been adduced in support of the idea of the presence of disease in such cases. Very many cases are on record of the continuence of menstruation during pregnancy. Dr. Hewett has reported a case of a woman who did not miss her courses once during three successive pregnancies, but they occurred each fortnight.

Hydrocele.—Dr. James Young of Edinburgh, has introduced the use of an *iron wire seton*, as suggested by Prof. Simpson, in the treatment of hydrocele. Dr. Gillispie has reported his experience in the use of the iron wire in the treatment of those cases, and his experience is decidedly adverse to it.

Scorbutis.—Prof. S. Roda, often uses in conjunction with other treatment, the following:

℞. Decoction of Malt, with fir sprouts, 11 parts.
Yeast,
Syrup of Orange Peel, āā 1 part. M.

The dose is a table-spoonful once in two hours.

Rue in Uterine Hemorrhage.—This plant has for many years, probably centuries, been in use as a uterine stimulant, but is frequently given in such large doses as to do harm by over stimulation. Not more than *half-a-grain* of the pulverized plant, repeated twice a day, will usually be required.

Scarlet Fever and Measles.—After the redness of the skin has disappeared, M. Scoutetten advises to smear the body all over with sweet oil. The next day he should take a warm bath, and two or three hours afterward, when the skin is quite dry, the smearing is to be repeated.

Cancer of the Breast—Velpeau has published a new edition of his work on Diseases of the Breast, containing eight hundred new observations in addition to those reported in the former edition. His more recent observations go to establish the fact that about one fourth of the tumors of the breast are benign. Dr. Lee reports the case of a woman who gave birth to five children after both breasts had been removed.

Belladonna as a Milk-arrester.—Drs. Newmann, Tend, Miller, Blytham, and others, report cases of the arrest of milk by the use of belladonna applied to the breast. A very convenient and satisfactory form is composed of equal parts of the extract of belladonna, and of glycerine.

Iodide of Potassium as a Milk-arrester.—Dr. Roussel has been quite well pleased with the use of six or eight grains a day of the iodide, as a milk arrester in engorgement of the mammæ.

Ipecacuanha in Malarous Intermittent.—Dr. Laural has found ipecacuanha, in doses of from three to five grains, taken every morning, cure a patient in one week, of an intermittent which had obstinately resisted the action of quinia and other anti-miasmatics.

Muriate of Baryta in Tetanus.—Prof. Eve, in his letters from the seat of war in Itatly, mentions the recovery of four patients from tetanus, from the use of muriate of baryta in doses varying from six to thirty grains, repeated three times a day.

Saccharated Lime Water.—The ordinary simple syrup will dissolve about twenty times as much lime as pure water will dissolve, or about twenty grains of lime to each ounce of syrup. Hence this is preferable to ordinary lime water for internal administration. But the extra strength should not be forgotten, and it must always be diluted when taken. From ten to thirty drops of the lime syrup, in a glass of water or milk, is a dose.

Replacement of an extracted Tooth.—Dr. T. H. Harding, a Dentist of London, advises, if a *sound* tooth be removed, it should at once be returned to the alveolus; and that there is a reasonable prospect that it will remain vitalized and useful. More than fifteen years since the writer of this tried this plan with quite satisfactory results.

MISCELLANY.

TRISMUS NASCENTIUM.

This too often fatal disease of infants has attracted no small share of attention, and led to the formation of various hypotheses in regard to its cause and nature, the more commonly received of which appears to be that a traumatico-tetanic condition of the umbilicus is the exciting cause; and the virus absorbed from the umbilicus in the circulation, is the cause *per se* of the trismus.

The umbilicus *may* be in a condition to allow of the absorption of a virus from it, in some parts of the country; but in many portions, and especially among the higher classes of people, the umbilicus is never allowed to decompose in a manner that any fluid can be absorbed from it; and yet trismus is by no means unfrequent even there.

On the 20th of Sept. 1851, the writer of this attended a woman in labor, who had previously borne ten or twelve children. The labor terminated favorably without any thing occurring worthy of note; and the next day, I found the mother and child apparently as well as is usual at that date after confinement. On the 28th of the same month, I was called to see the child, who, it was said, had been taken in convulsions the day previous. At the time of my visit, I found the infant nearly dead, and presenting the usual symptoms manifested in trismus. I carefully examined the child, and found the funis *dried up* to a string, without any inflammation in the umbilical region, obstruction of the bowels, retention or suppression of the urine, or any other abdominal or intestinal derangement that could be discovered, that might have produced the disease.

On examining the head, it was discovered that *the occipital bone was pressed under the parietal bones.* The nurse said that she had observed the bones to be pressed one under the other in that manner since the first appearance of the convulsions, and she had no doubt but the violent spasmodic struggles of the child had produced the change, as she had *not* observed them to be so situated previously. The mother then said that she had previously lost three infants shortly after birth, and in each case the bone of the back of the head had been drawn under the others by the struggles of the child.

This mother and her nurse, who was *her* mother, then cited several cases within their personal observation, in proof of the correctness of their view of the case; doubtless correctly narrating the cases, but considering the *cause* as the result of the effect observed.

Without wishing to controvert the opinion that the decomposition, or other diseased condition of the funis, may in many instances, produce trismus, I cannot but suppose that in very many instances the disease is caused by a displacement of the occipital bones like that here observed; and is to be cured by replacing them, and avoiding pressure upon them.

PILES.

As an appendix to what has already been said in this JOURNAL concerning the treatment of piles, the following has been contributed.

Within a few years much light has been thrown upon the pathology of hemorrhoids which has contributed not a little to a more rational plan of treatment. Formerly, the liver was the obstructed and offending viscus, therefore the target for mercurial and podophyllin practice. Later, pepper, black or red (the choice depending much upon the desire to follow Thompson or Brodie) given internally, and nitric acid applied topically, have affected more cures.

It is now pretty generally conceded that piles are a prolapsion of the anus in columns and depend upon debility or paralysis of portions of the anal apparatus. It is granted also that the difficulty, though aggravated by constipation, diarrhœa, and anything which favors debility, is principally local. After the tumors have prolapsed, irritation and all those well known symptoms set in. Lymph is effused and blood is collected in the lumps until the compressed nerves of the part become acutely sensitive. The tumors are too large and hard to be returned. To overcome such a "fit of the piles" the following ointment may be prescribed.

℞. Ung. Stramonii. ℥jss.
Tannic acid, grs. iv.
Strychnia, grs. ij. M.

The patient is to envelope the forefinger in a piece of soft flannel and apply the ointment thoroughly, several times a day. Generally a cure follows in a few days. If the tumors be exceedingly sensitive, morphia may be added to the recipe.

COINCIDENCE.

By some oversight every American edition of *Wilson's Anatomy* gives the insertion of the Sartorius muscle as the "inner tuberosity" of the tibia instead of the *tubercle* of that bone. *Hodges' Dissector* has the same error. Great men will by coincidence commit the same blunders.

DENTISTRY IN THE WEST.—EXTENSIVE CORRESPONDENCE.

We were standing in the Post Office a few days since when we saw a large lot of Postage Stamps purchased for John T. Toland of the Dental Depot, Publisher of the Dental Register of the West. On enquiry, we learned that he had purchased that day $431,00 of postage stamps, and that his purchase that week amounted to $620,00.

Being somewhat interested to learn the extent of the business, we found that there were sold in Cincinnati about $75,000 worth of Dentist's material, Instruments, Furniture, etc., annually, nearly all of which is manufactured here, except the Artificial Teeth, which are made in Philadelphia, and the Gold Foil, which is made in nearly all parts of the country.

With the aid of the Ohio College of Dental Surgery, The Dental Register of the West, Prof. Taft's admirable treatise on Operative Surgery, and the extensive Dental Depot's of Toland and Brown, Cincinnati is rapidly becoming a great *centre* for matters pertaining to dentistry, for the entire country.

TERATOLOGICAL.

Dr. C. A. Wheeler of West Boylston, Mass., lately waited upon a woman who gave birth to twin female children which were united, *a la* Chang and Eng, and Rita-Christina. A similar case was recently reported as happening in Georgia, the strange progeny being alive and doing well. In the case coming in the practice of Dr. Wheeler, the infants, of ordinary size, were united from the clavicle to the umbilicus, the heads, arms, and legs being perfect and distinct. Probably by some want of harmony in the action of the halves of a kind of double heart, the monster failed to survive its birth.

MARRIED.

In Andover, December 1st., by Rev. S. C. Leonard, assisted by Rev. D. D. Winn, of Salem, Dr. Hervey Quimby, of Salem, to Miss R. Georgetta Foster, daughter of George Foster, Esq., of Andover, Mass.

DIED.

James T. Hustead, M. D., a pupil of the Eclectic College of Medicine died of pulmonary consumption, on the 27th. of November last, in Fayette Country, Pa , and in the 27th year of his age.

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